# Memorial University of Newfoundland 

## CALENDAR 2019-2020

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Perched on Canada's North Atlantic coast, Memorial University of Newfoundland is a destination for discovery. A beacon for the 21 st-century explorer, Newfoundland and Labrador's university is a unique learning community founded as a living memorial to those who lost their lives in the First World War - "that in freedom of learning their cause and sacrifice might not be forgotten." Today more than 18,000 students from over 110 countries come together to discover. From the classics to advanced technology, the University offers certificate, diploma, undergraduate, graduate and postgraduate programs across five campuses, numerous locations and online. A global network of almost 95,000 accomplished alumni throughout the world strengthens Memorial University of Newfoundland's capacity and reputation for leadership in world-class research, teaching and public engagement.

The 2019-2020 University Calendar and the printable Calendar PDF files are on-line at www.mun.ca/regoff/calendar.

## IN MEMORIAM

Three hundred and ten former students of the Memorial University College offered themselves for active service in the Second Great War, 1939-1945. The University holds in special honour the past students who have been reported dead or missing and whose names are here given.




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## GENERAL INFORMATION



## GENERAL INFORMATION

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## 1 Note

The contents of this calendar set forth the intentions of the University at the time of publication, with respect to the matters contained therein. THE UNIVERSITY EXPRESSLY RESERVES THE RIGHT TO DEVIATE FROM WHAT APPEARS IN THE CALENDAR WITHOUT NOTICE, including both the content and scheduling therein, in whole or in part, and including, without limiting the generality of the foregoing, the right to revise the content of, and to cancel, defer, reschedule or suspend, in whole or in part, the scheduling of particular periods of instruction, courses, or programs, and the academic program of the University, and to alter, accelerate or defer fees and charges, and to do any or all of the above either in order to serve what the University considers to be the best interests of the academic or student community or of the University itself, or because of any circumstance or occurrence, whether occurring by or through the wilful act or negligence of the University, its agents, servants and employees, or otherwise and whether or not beyond the reasonable or other control of the University, and without limiting the generality of the foregoing, as a result of circumstances or occurrences including financial resources, natural catastrophe or disaster, the health, safety and well-being of the employees or students of the University, labour disagreements or disputes, slow-downs, work-stoppages, and strikes. THE UNIVERSITY DOES NOT ACCEPT, AND HEREBY EXPRESSLY DISCLAIMS, ANY OR ALL RESPONSIBILITY OR LIABILITY to any person, persons or group, for any loss, injury, damages or adverse effect, either direct or indirect, consequential or otherwise, arising out of any one or more of such deviations. The University hereby disclaims liability to any person who may suffer loss as a result of reliance upon any information contained in this calendar.
The rights and obligations of parties subject to the Calendar and the rules and regulations of Memorial University of Newfoundland shall be governed by the laws of the Province of Newfoundland and Labrador. Any action or proceeding against Memorial University of Newfoundland shall be brought in the Province of Newfoundland and Labrador.
Each and every of the subsequent provisions contained in this Calendar, and the relationship, both legal and otherwise, between the University, and its students, is expressly subject to and governed by the above provisions
The Office of the Registrar will assist students with any questions or problems which might arise concerning the interpretation of academic regulations. It is, however, the responsibility of students to see that their academic programs meet the University's regulations in all respects.

## 2 The Memorial University of Newfoundland Code

All members of the Memorial University of Newfoundland Community, which includes students, faculty, and staff, shall treat others with respect and fairness, be responsible and honest, and uphold the highest standards of academic integrity.

## 3 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 4 Glossary of Terms Used in This Calendar

In this calendar "Grenfell Campus" or "Grenfell " refers to Grenfell Campus, Memorial University of Newfoundland and "Marine Institute" refers to the Fisheries and Marine Institute of Memorial University of Newfoundland. "University", when capitalized, refers to Memorial University of Newfoundland.

## Academic standing:

is an enrolment status normally determined each semester by a regular evaluation procedure used to assess whether or not students are meeting the standards prescribed for continuing in the University and/or their programs.

## Academic unit:

refers to a centre, department, division, faculty, program or school, other than an administrative unit, as the context requires.
Academic year:
runs from September 1 to August 31.
Accelerated course:
is a course that is offered in a shorter time frame than a semester or session.
Administrative unit:
refers to an office, division or centre, other than an academic unit, as listed in the Offices of the University section of the Calendar.
Appeal:
is the challenge of, or the request for review of, a judgment regarding the application of regulations.
Assignment:
is an evaluative exercise including but not limited to assigned work, term papers and projects.

## Certificate:

is an academic designation awarded for the completion of a specified program of study which is of shorter duration than a degree or diploma.
Challenge for credit:
is the request for consideration of academic credit resulting from experience or knowledge gained elsewhere for which transfer credit cannot be awarded.
Co-requisite course:
is a course which may be taken concurrently with or successfully completed prior to the course for which it is required.
Course:
is a unit of work in a particular subject normally extending through one semester or session, the completion of which normally carries credit toward the fulfilment of the requirements of certain degrees, diplomas or certificates.

## Course number:

courses are designated by four characters. The first character signifies the level of the course. Where all four characters are numeric, the last three are used by academic units to indicate various information such as course sequence and area of study.

Where the last character is alphabetic, the letter:
$\mathbf{A}$ or $\mathbf{B}$ identifies a linked course. No credits or points are given until the " B " part is completed.
C identifies an English course that does not carry credit towards a degree, diploma or certificate.
F identifies a foundation course that is intended to remedy a specific academic weakness and does not carry credit towards a degree, diploma or certificate.
L identifies a period of university-level learning involving residency outside of Canada, normally through the Faculty of Humanities and Social Sciences.
T identifies an undergraduate teaching internship offered by the Faculty of Education.
W identifies a course in either a work term in a co-operative program or a special project in certain of the professional schools and faculties and may or may not be assigned credit hours.
X identifies a course which represents an entire semester's work and carries at least 15 credit hours.

## Courses offered outside of the normal time frame:

are those with different start and/or end dates than those of the semester or session.

## Credit hour:

is the measure used to reflect the relative weight of a given course toward the fulfilment of appropriate degree, diploma, certificate, major, minor, or other program requirements. A weight of 1 credit hour normally means that the course meets for lectures one hour per week for the duration of a semester or two hours per week for the duration of a session. Unless otherwise indicated, a course normally has a credit value of 3 credit hours.

## Credit-restricted courses:

are courses which are closely related but not equivalent. Credit is limited to one of the credit-restricted courses. Normally, creditrestricted courses cannot be substituted, one for the other, to satisfy program requirements.

## Cross-listed courses:

are courses which are listed under two or more academic units and which can be taken for credit from one unit only Cross-listed courses can be substituted, one for the other, to satisfy program requirements.

## Degree:

is an academic designation awarded for the completion of a specified program of study which is of longer duration than a diploma or certificate.

## Diploma:

is an academic designation awarded for the completion of a specified program of study which is of shorter duration than a degree and longer duration than a certificate.

## Equivalent courses:


are those which are determined to be equal for credit determination, although the subject area or course number will differ. These are normally identified with the phrase "Same as".

## Examination:

is an evaluative exercise including but not limited to tests, quizzes or mid-terms, final or supplementary examinations.

## Foundation course:

is a course intended to remedy a specific academic weakness and is identified by the letter "F" as the last character of the course number. A foundation course does not carry credit towards a degree, diploma or certificate.
GPA:
is the abbreviation for grade point average.

## Head of academic unit:

includes but is not limited to co-ordinator, dean, department head, division head, associate vice-president academic, vicepresident, or equivalent.
In-class work:
is any part of the evaluation in a course which is to be completed by the student in a supervised setting, at a time and location designated by the University.

## Inactive courses:

are courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year.

## Last week of the lecturing period in a semester or session:

consists of the final five days of lectures, including statutory holidays on days when lectures would otherwise be held, in a semester or session.

## Lecturing period:

is a designated period of lectures within a semester or session as defined by the University Diary.
Linked course:
is a course comprising two components and is normally identified by the letter "A" or "B" as the last character of the course number. No credits or points are given until the " B " part is completed.
Major:
is a subject or field of study which a student normally specializes in during the course of degree studies.
Minor:
is a subject or field of study which a student normally pursues secondary to a major during the course of degree studies.

## Online course

is a for credit university course delivered entirely over the Internet. Examinations may be written at exam sites or online. Students access course materials and participate in course activities through Memorial University of Newfoundland's learning management system.
Prerequisite course:
is a course which must be successfully completed prior to commencing the course for which it is required.
Program:
is a series of courses, the successful completion of which, if all requirements are met, qualifies the candidate for a degree, diploma or certificate.

## Registration

is the process of selecting, enrolling in, and being assessed fees for courses.

## Registration period:

is, in any semester, the period extending from the first day of registration to two weeks following the first day of lectures, as stated in the University Diary. In any session, it is the period extending from the first day of registration to one week following the first day of lectures, as stated in the University Diary.

## Repeatable course:

is a course that may be taken for credit in several semesters to a maximum number of credit hours. All such courses shall have specified both the number of credit hours assigned per semester and the maximum number of credit hours to be awarded.

## Semester:

is a period of approximately fourteen consecutive weeks during which there are at least twelve weeks of lecture. Normally the Fall semester commences in early September, the Winter semester in early January, and the Spring semester in early May.

## Session:

is a period of approximately seven consecutive weeks in the Spring semester during which there are at least six weeks of lecture. The first half of Spring semester is designated as Intersession; the second half of Spring semester is designated as Summer session.

## Student Self-Service:

is a suite of e-business student services including registration and the provision of personalized student information.

## Take-home work:

is any part of the evaluation in a course which is to be completed by the student without supervision or a designated location, normally subject to a due date determined by the University.

## Transcript:

is the complete and unabridged report of a student's academic record.

## Transfer credit:

is academic credit granted for work completed at an institution other than Memorial University of Newfoundland.
Waiver:
is the permission granted by the appropriate authority for exemption from a particular program requirement and/or a particular university regulation.

## 5 University Diary for the Academic- Year 2019-2020

June 1, 2019, Saturday
July 1, 2019, Monday
July 15, 2019, Monday

July 16, 2019, Tuesday

August 5, 2019, Monday

August 19, 2019, Monday
August 21 to August 23, 2019 Wednesday to Friday
August 26, 2019, Monday

August 28, 2019, Wednesday September 1, 2019, Sunday

## September 2, 2019, Monday

September 2 to September 3, 2019
Monday \& Tuesday
September 3, 2019, Tuesday
September 4, 2019, Wednesday

September 7, 2019, Saturday
September 10, 2019, Tuesday
September 11, 2019, Wednesday

Registration begins for Residents and for undergraduate Medical students
Academic year begins for Residents
Final date for filing, with the Registrar, applications for Degrees and Diplomas for Fall Convocation 2019. Applications received after this date will be processed as time and resources permit.
Registration begins for eligible students registering in undergraduate courses, Fall semester 2019
Deadline for registration and fees payment for Residents
Registration begins for graduate students, Fall semester 2019
Sessions begin for Phase 4 Medical students (Class of 2020)
Sessions begin for Phase 4 Medical students (Class of 2021)
Orientation for Phase 1 Medical students (Class of 2023)

- Fall Work Term begins for Co-operative Education students

Sessions begin for Medical students (Classes of 2022 and 2023)
Deadline for registration for undergraduate Medical students
Fall Welcome begins
Final date for filing applications for admission to graduate programs commencing in Winter Semester 2020. Applications received after this date will be processed as time and resources permit. Applicants should note that most graduate academic units have earlier deadlines and should be contacted directly for further information.
Labour Day, no lectures
Orientation for all new first semester undergraduate students
Fall Internship begins for Education students (Primary/Elementary and Music Education)
Deadline for fees payment, including for undergraduate Medical students, Fall semester Lectures begin, Fall semester
Fall Welcome ends
Regular meeting of the Senate
Final date for receipt, by the Registrar, of replacement grades for "INCOMPLETE" grades in undergraduate and graduate courses, Spring semester (Intersession, Summer session and 14week) 2019


January 1, 2020, Wednesday

January 6, 2020, Monday

January 10, 2020, Friday
January 13, 2020, Monday

January 14, 2020, Tuesday
January 15, 2020, Wednesday

January 20, 2020, Monday

January 27, 2020, Monday

February 1, 2020, Saturday

February 3, 2020, Monday


February 11, 2020, Tuesday
February 17 to February 21, 2020 Monday to Friday
February 24, 2020, Monday

March 1, 2020, Sunday
March 2, 2020, Monday

March 10, 2020, Tuesday
March 16, 2020, Monday

March 23, 2020, Monday

April 3, 2020, Friday

Final date for filing applications for admission to graduate programs commencing in Spring semester 2020. Applications received after this date will be processed as time and resources permit. Applicants should note that most graduate academic units have earlier deadlines and should be contacted directly for further information.
Deadline for fees payment, including for undergraduate Medical students, Winter semester Lectures begin, Winter semester
Sessions resume for all Medical students
Winter Internship begins for Education students (Intermediate/Secondary and Music Education)
Winter Welcome and Orientation for all new first semester undergraduate students begins
Winter Work Term begins for Co-operative Education students

## Winter Welcome ends

Final date for receipt, by the Registrar, of replacement grades for "INCOMPLETE" grades in undergraduate and graduate courses, Fall semester 2019
Final date for submission of Master's and Doctoral Theses and Reports for examination, by candidates who expect to receive their degree at the Spring Convocation 2020. Theses and Reports received after this date will be processed as time and resources permit.

## Regular Meeting of the Senate

Final date for filing, with the Registrar, applications for Degrees and Diplomas for the Spring Convocation 2020. Applications received after this date will be processed as time and resources permit.
End of Regular Registration Period and last day for undergraduate and graduate students to add courses, Winter semester
Last day for Medical students to withdraw from a Phase and receive 100\% refund of tuition fees, Payment 2
Last day for undergraduate students to drop courses and receive a $100 \%$ refund of tuition fees, Winter semester

Final date for departments to submit Recommendation for Award of Degree in order for graduate students to be deregistered from Graduate Registration 9000/Medicine 9900 without incurring any liability for continuance fees, Winter semester
Final date for graduate students to withdraw from programs without incurring liability for tuition fees, Winter semester
Last day for Medical students to withdraw from a Phase and receive $50 \%$ refund of tuition fees, Payment 2
Last day for undergraduate students to drop courses and receive a $50 \%$ refund of tuition fees, Winter semester

Final date for filing undergraduate applications for admission/re-admission to Spring semester (14-week, Intersession and Summer session) 2020. Applications received after this date will be processed as time and resources permit.
Last day for Medical students to withdraw from a Phase and receive $25 \%$ refund of tuition fees, Payment 2. No tuition fees are refunded for withdrawing from a Phase after this date.
Last day for undergraduate students to drop courses and receive a $25 \%$ refund of tuition fees, -Winter semester. No tuition fees are refunded for courses dropped after this date.

Regular meeting of the Senate
Winter semester break begins at St. John's and Grenfell Campuses
Final date for departments to submit Recommendation for Award of Degree in order for graduate students to receive a $50 \%$ refund of continuance fees, Winter semester
Lectures resume at St. John's and Grenfell Campuses
Final date for filing undergraduate applications for admission/re-admission to Fall semester 2020. Applications received after this date will be processed as time and resources permit.

Last date for undergraduate and graduate students to drop courses without academic prejudice, Winter semester
Regular meeting of the Senate
Final date for Departments to submit Recommendation for Award of Degree in order for graduate students to receive a $25 \%$ refund of continuance fees, Winter semester

Registration begins for eligible students registering in undergraduate courses, Spring semester (14-week courses, Intersession and Summer session) 2020
Lectures end, Winter semester
Sessions end for Phase 4 Medical students (Class of 2020 only)
Winter internship ends for Education students (Intermediate/Secondary)
April 8, 2020, Wednesday

Examinations begin, Winter semester
Final date for submission of Work Reports by Co-operative Education students


| June 29, 2020, Monday | Final date for departments to submit Recommendation for Award of Degree in order for graduate students to receive a $50 \%$ refund of continuance fees, Spring semester <br> Lectures begin for Summer session |
| :---: | :---: |
| July 1, 2020, Wednesday | Memorial Day holiday, no lectures |
| July 6, 2020, Monday | End of Regular Registration Period and last day for undergraduate and graduate students to add courses, Summer session |
|  | Last date for undergraduate and graduate students to drop courses without academic prejudice, 14-week Spring semester |
|  | Last day for undergraduate students to drop courses and receive a $100 \%$ refund of tuition fees, Summer session |
| July 9, 2020, Thursday | Last day for undergraduate students to drop courses and receive a $50 \%$ refund of tuition fees, Summer session. |
| July 13, 2020, Monday | Last day for undergraduate students to drop courses and receive a $25 \%$ refund of tuition fees, Summer session. No tuition fees will be refunded for Summer session courses dropped after this date. |
| July 15, 2020, Wednesday | Final date for filing, with the Registrar, applications for Degrees and Diplomas for the Fall Convocation 2020. Applications received after this date will be processed as time and resources permit. |
| July 20, 2020, Monday | Final date for Departments to submit Recommendation for Award of Degree in order for graduate students to receive a $25 \%$ refund of continuance fees, Spring semester |
| July 27, 2020, Monday | Last date for undergraduate and graduate students to drop courses without academic prejudice, Summer session |
| July 31, 2020, Friday | Sessions end for Medical students (Class of 2021) |
| August 7, 2020, Friday | Lectures end, 14-week Spring semester. Lectures will follow the Wednesday schedule on this day only. |
| August 8, 2020, Saturday | Lectures end, Summer session. Lectures will follow the Wednesday schedule on this day only. |
| August 10, 2020, Monday | Examinations begin, 14-week Spring semester and Summer session |
|  | Final date for submission of Work Reports by Co-operative Education students |
| August 12, 2020, Wednesday | Examinations end, Summer session |
| August 15, 2020, Saturday | Examinations end, 14-week Spring semester |
| August 21, 2020, Friday | Spring Work Term ends for Co-operative Education students |

## 6 Governing Bodies and Staff

### 6.1 The Board of Regents

www.mun.ca/regents

## Chair of the Board

Iris Petten, St. John's
An up-to-date listing of members of the Board of Regents is available at www.mun.ca/regents/about/regents.

### 6.2 The Senate

www.mun.ca/senate
President and Chair
Dr. Gary Kachanoski
An up-to-date listing of members of the Senate is available at www.mun.ca/senate.

### 6.3 University Officers and Staff

Visitor
Hon. J.M. Foote, PC, ONL, B.A., B.Ed., Hons. Dip. RTJA; Lieutenant-Governor of Newfoundland and Labrador

## Chancellor

S. Dyer Knight, CM, ONL, RN, B.Mus., B.Mus.Ed., LL.D. Memorial, M.A. St. Thomas University, Minnesota, Ph.D. University of London

Chair of the Board of Regents
I. Petten, B.A., B.Voc.Ed. Memorial

President and Vice-Chancellor
G. Kachanoski, B.Sc.(Hons.), M.Sc. Saskatchewan, Ph.D. California (Davis)

Provost/Vice-President (Academic)/Pro Vice-Chancellor
N. Golfman, B.A.(Hons.) Alberta, M.A., Ph.D. Western Ontario

Vice-President (Marine Institute)
G. Blackwood, B.Sc.(Hons.), M.A. Memorial

## Vice-President (Administration and Finance

K. Decker, B.Comm.(Hons.) Memorial, C.A.

Vice-President (Research)
N. Bose, B.Sc., Ph.D. Glasgow

Vice-President (Grenfell Campus)
J. Keshen, B.A., Ph.D. York, M.A. Carleton

## 7 Offices of the University

Fisheries and Marine Institute, Grenfell Campus, Special Divisions and members of Faculties and Schools are available in the * appropriate sections of the University Calendar and the searchable website at www.mun.ca/people_departments/a_z_listing.php.

### 7.1 Aboriginal Affairs, Office of

www.mun.ca/aboriginal_affairs

## www.mun.ca/aro

## Special Advisor to the President on Aboriginal Affairs

Andersen, C., B.A., M.A., M.B.A. Memorial
An up-to-date personnel listing is available at www.mun.ca/aboriginal_affairs/Contact.php.
The Office of Aboriginal Affairs provides coordination and leadership on Aboriginal matters at the University. The Office oversees and helps to coordinate internal, multi-campus activities related to Aboriginal education and student supports, and serves as the main point of contact on Aboriginal affairs both within the University and between the University and the broader community. The Office is supported by an Aboriginal Advisory Committee whose members are representative of the Labrador Institute, the Grenfell Campus, the Marine Institute and the St. John's Campus.
The Office of Aboriginal Affairs also includes the Aboriginal Resource Office which is responsible for providing support services to Aboriginal students. Additional information is available at www.mun.ca/aro.

### 7.2 Ancillary Operations

www.mun.ca/ancillary

## Interim Director

Rose, W.
An up-to-date personnel listing is available at www.mun.ca/ancillary/contact.
Ancillary Operations encompasses a variety of operations at Memorial University of Newfoundland, including the Bookstore, Campus Card, Lockers, Liquor Services, Vending, Food Services, and the University Centre. These operations serve to support the university community and enhance the experience of students, staff, faculty and guests.

### 7.3 Associate Vice-President (Academic) Students, Office of

www.mun.ca/vpacademic/Who_We_Are
Associate Vice-President (Academic) Students
Hardy Cox, D., B.S.W. Memorial, M.S.W. Carleton, Ed.D, Maine
An up-to-date personnel listing is available at www.mun.ca/vpacademic/Who_We_Are.
The Associate Vice-President (Academic) Students ((AVP (A) Students) provides leadership to create and maintain integrated, effective pan-university supports for students. The AVP(A) Students also works with the University's undergraduate and graduate student organizations to ensure the interests of students are represented in University decision-making processes and committee activities.
The following units are included in the $\operatorname{AVP}(\mathrm{A})$ Students' portfolio: Student Life; Student Residences; and the Student Wellness and Counselling Centre.
The AVP(A) Students also oversees the administration of the Student Code of Conduct, which outlines the behaviors which the University considers to be non-academic misconduct offences, and the range of remedies and/or penalties which may be imposed. For more information about the Student Code of Conduct, see www.mun.ca/student.

### 7.3.1 Student Life

## www.mun.ca/student

An up-to-date personnel listing is available at www.mun.ca/student.
Student Life is dedicated to supporting and encouraging students to connect, engage and belong during their time at Memorial University of Newfoundland. Dedicated to student achievement and success, this collection of units on the St. John's Campus includes: Career Development and Experiential Learning; Glenn Roy Blundon Centre for Students with Disabilities; Student Experience Office; and Student Support and Crisis Management.

### 7.3.2 Student Residences

## www.mûn.ca/hfcs

An up-to-date personnel listing is available at www.mun.ca/residences/contact/index.php.
Student Residences provides housing services and resources for students, as well as summer accommodations for students and visitors. Residences located on campus include traditional residence halls (Paton College), suite style (Macpherson College), Burton's Pond Apartments, and the Signal Hill Campus Graduate Accommodations. Supports and programming for students living in residence are provided through Residence Life.

### 7.3.3 Student Wellness and Counselling Centre

www.mun.ca/counselling/home/
www.mun.ca/health
Up-to-date personnel listings are available at www.mun.ca/counselling/contact/ and www.mun.ca/health/staff.php.
Family physicians, nurses, psychologists, counsellors and a psychiatrist are available to provide rapid access interprofessional primary health care and to assist students in taking responsibility for their own health and well-being. Programs and supports include the diagnosis and treatment of physical and psychological illness, support for study skills development, career assessment and counselling, the activation and maintenance of wellness and the promotion of health education. The centre also serves as a training site for advanced students in a number of helping and mental health professions.

### 7.4 Chief Information Officer, Office of the (OCIO)

## www.mun.ca/cio

## Chief Information Officer

Greene, S., B.Sc., M.Ed. Memorial
An up-to-date personnel listing is available at www.mun.ca/cio/about/contacts/index.php.
The mandate of the Office of the Chief Information Officer (OCIO) is to promote and support an environment that enables students, faculty and researchers to access and utilize technology, data and information to generate knowledge and contribute to it in ways that benefit the University, and the community as a whole. The mandate also aims to ensure that systems and processes which support the University are maximized through the collaborative and effective use of technology and information management best practice.

### 7.5 Chief Risk Officer, Office of the (OCRO)

www.mun.ca/ocro
Chief Risk Officer
Parsons, K., B.Sc. Dalhousie, LL.B. Saskatchewan, CRM Toronto
An up-to-date personnel listing is available at www.mun.ca/ocro/OCROStaffDirectory.php.
The Office of the Chief Risk Officer (OCRO) develops and implements frameworks and systems to manage risk across the entire scope of the University, all in a manner that enables the University to fulfill its mission and strategic goals. The OCRO reports directly to the Vice-President (Administration \& Finance). The units that report to the OCRO include Campus Enforcement and Patrol (CEP), Enterprise Risk Management, and Environmental Health and Safety.

### 7.5.1 Campus Enforcement and Patrol (CEP) <br> www.mun.ca/cep

An up-to-date personnel listing is available at www.mun.ca/ocro/OCROStaffiirectory.php.
Campus Enforcement and Patrol (CEP) falls under the portfolio of the Office of the Chief Risk Officer. The activities of the services are well established through policies, directives and best practices. CEP's primary responsibilities are the safety and security of the University community. CEP is dedicated to maintaining the Campus as a safe and pleasant place to live, work, and study. Campus Enforcement and Patrol is on duty 24 hours a day, seven days a week and patrol the Campus property. The services of CEP are available to all faculty, staff, students, and visitors.

### 7.5.2 Enterprise Risk Management



### 7.7 Facilities Management, Department of

www.mun.ca/facman
Director, Administrative Services
Rose, W.

## Director, Engineering \& Construction

Bowden, K., B.Sc., B.Eng., B.A. Memorial, P.Eng.

## Director, Operations \& Maintenance

Boland, J., Interprovincial Power Engineer-First Class, B. Eng. Memorial, P. Eng.
Up-to-date personnel listings are available at www.mun.ca/facman/about/dept_directory.php.
The founders of Memorial University of Newfoundland dedicated the University itself as a living memorial to those who served in the two world wars. Guided by this heritage and mission, the Department of Facilities Management embraces its responsibility to maintain, protect, and further develop the University's major infrastructure. The Department's team is committed to the pursuit of excellence in all of its operations including facilities engineering and development, central utilities, energy systems and controls, custodial services, building services and grounds, sustainability, administrative services and space planning and administration.

### 7.8 Faculty Relations, Office of

www.mun.ca/facultyrelations
www.mun.ca/facultyrelations/academic

## Director of Faculty Relations

Williams, G., B.Comm., M.E.R. Memorial
An up-to-date personnel listing is available at www.mun.ca/facultyrelations/contact,
The Office of Faculty Relations is responsible for the negotiation and administration of collective agreements for faculty, per course instructors, teaching assistants, and postdoctoral fellows. Information regarding the academic employee groups and the collective agreements is available at www.mun.ca/facultyrelations/academic.
As well, the Office of Faculty Relations addresses labour relations matters arising out of the collective bargaining relationships with MUNFA, LUMUN (Per Course Instructors and Postdoctoral Fellows), and TAUMUN, including grievance and arbitration proceedings and Labour Relations Board matters. In addition, the Office of Faculty Relations:

1. is involved in all aspects of the employment of academic staff. The Office makes per course, extra teaching, and contractual academic appointments less than one year;
2. sets the starting salaries of all academic personnel, and determines eligibility for leaves;
3. provides advice, assistance, and education in all matters involving faculty, including the recruitment process, promotion and tenure, discipline, sabbatical, and administrative leave eligibility, and all collective agreement matters;
4. provides employment support, orientation opportunities for new faculty, and educational opportunities for academic administrators; and
5. is involved in policy development, implementation and administration.

### 7.9 Financial and Administrative Services, Department of

www.mun.ca/finance

## Director

Collis, D., B.Comm. Memorial, CPA, CA
An up-to-date personnel listing is available at www.mun.ca/finance/contacts.
The Department of Financial and Administrative Services oversees the financial operation of Memorial University of Newfoundland. The Department provides quality services in the areas of Administration, Disbursements, Accounts Payable, Customs, Tendering, Research Accounting, Cashier's Office, Financial Systems, Financial Reporting and Analysis, and Print and Mail Services.

### 7.10 General Counsel, Office of

www.mun.ca/generalcounsel

## General Counsel

Cooper, M.C., B.Comm.(Hons.) Memorial, M.I.R. Toronto, L.L.B. Dalhousie, CIC.C, CCCA
An up-to-date personnel listing is available at www.mun.ca/generalcounsel/who.
The Office of the General Counsel provides legal and strategic advice to the University, the senior administration, and the Board of Regents; provides education initiatives on legal matters affecting the University; and works with the University on the development of policies and procedures to ensure legal compliance and best practices.

### 7.11 Human Resources, Department of

www.mun.ca/hr

## Director

Dodge, S., B.Comm. Memorial
An up-to-date personnel listing is available at www.mun.ca/hr/about/contact.php.
The Department of Human Resources is more than payroll, pensions and benefits. The Department of Human Resources provides the foundation to advance and maintain a strong institutional culture that values the contributions of all within the organization. This culture is based on clear values that are accepted and put into practice by all: the principles of respect, recognition, support, equity and fairness, effective leadership, recruitment and retention, learning and development, work-life balance (including health and wellness) and career opportunity. Human Resources works to provide optimal service delivery to clients and ensure best practices in internal processes through measurement. Through a long-term strategy in Human Resources, Memorial University of Newfoundland continues to implement the people development strategy (mentoring, succession, coaching, leadership and career development), transfer knowledge
to new employees, meet employment equity targets, improve employee satisfaction, and enhance connections prior to and into retirement.

### 7.12 Information Access and Privacy Office (IAP)

## www.mun.ca/iap

University Access and Privacy Advisor
Thorne, R., B.A. Memorial, CIPP/C
An up-to-date personnel listing is available at www.mun.ca/iap/contact.
The Information Access and Privacy Office (IAP) was created in November 2005 to assist the University in complying with the provincial Access to Information and Protection of Privacy Act, 2015 (ATIPPA) and other applicable privacy legislation, as well as developing best practices in information access and privacy matters.
The IAP Office provides strategic and day-to-day advice on access and privacy, conducts privacy impact assessments and reviews of projects and programs, manages requests for access to information under the ATIPPA, 2015 and delivers access and privacy training Further information may be obtained through the website at www.mun.ca/iap.

### 7.13 Information Technology Services (ITS)

www.mun.ca/its

## Director

Greene, S., B.Sc., M.Ed. Memorial
Up-to-date personnel listings are available at www.mun.ca/its/contact.
The mandate of Information Technology Services (ITS) is to lead the Planning, Design, Building and Support of the Core Information and Communications Technologies required to meet the strategic objectives of Memorial University of Newfoundland. In consultation with the Campus community, ITS is responsible to foster and support appropriate practices in information technology infrastructure, application development and management, business analysis, security, data, software and processes to create an effective and integrated environment.
Core Information and Communications Technologies are those systems and services available to the entire campus or which are panuniversity operational systems. Included are:

- Landline and mobile telephony
- Technology (internal, external, public networks and data centres)
- Development, management and operation of enterprise applications
- Centralized email, web services and collaborative tools
- Information Technology security management
- IT project management and consulting
- Service desk, IT purchasing and desktop support services
- Student computing (Portal, Information Commons, D2L, Labnet)


### 7.14 Institutional Analysis and Planning, Centre for (CIAP)

## www.mun.ca/ciap

## Interim Director

Matthews, K.R., B.A.(Hons.), M.B.A., M.E.R. Memorial, CPA, CMA
An up-to-date personnel listing is available at www.mun.ca/ciap/About.php.
The Centre for Institutional Analysis and Planning (CIAP) is responsible for the collection, analysis and dissemination of information and facilitation of decision-support and planning initiatives at Memorial University of Newfoundland.

### 7.15 Internal Audit, Office of

www.mun.ca/internalaudit
University Auditor
Dove, J., B.B.A. Acadia, CPA, CA, CIA
An up-to-date personnel listing is available at www.mun.ca/internalaudit/contact.
The purpose of Memorial University of Newfoundland's Office of Internal Audit is to provide independent, objective assurance and consulting services designed to add value and improve the University's operations. The mission of internal audit is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight. The Office of Internal Audit helps the University accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes. The University Auditor reports functionally to the Board of Regents through its Audit and Risk Committee and administratively (i.e., day-to-day operations) to the President and Vice-Chancellor.

7.16 Marketing and Communications, Division of<br>www.mun.ca/marcomm<br>Executive Director<br>Collins, V., B.A. Memorial

Up-to-date personnel listings are available at www.mun.ca/marcomm/people.
The Division of Marketing and Communications (MarComm) is dedicated to serving the University's internal and external marketing and communications needs, as well as to responding to the community's needs for information about Memorial University of Newfoundland. MarComm provides communications and marketing counsel and strategy, news services including the Gazette and today.mun.ca, as well as media relations and issues management (including emergency communications coordination). The Division also has expertise in institutional marketing, university event management (including Convocation), photography (including a university photo bank), graphic design, co-ordination of promotional projects, institutional web management and web content development. MarComm can provide
advice on protocol, reputation management, government relations and special event planning.

### 7.17 President, Office of the

www.mun.ca/president

## President and Vice-Chancellor

Kachanoski, G., B.Sc.(Hons.), M.Sc. Saskatchewan, Ph.D. California (Davis)
An up-to-date personnel listing is available at www.mun.ca/president/about.
The Office of the President undertakes the management and administration of the University as directed by the Board of Regents. The President provides leadership and overall strategic direction for both the academic and business affairs of the University.

### 7.18 Provost/Vice-President (Academic)/Pro Vice-Chancellor, Office of the

www.mun.ca/vpacademic
Provost/Vice-President (Academic)/Pro Vice-Chancellor
Golfman, N., B.A.(Hons.) Alberta, M.A., Ph.D. Western Ontario
An up-to-date personnel listing is available at www.mun.ca/vpacademic/Contact.
The Office of the Provost and Vice-President (Academic) has primary responsibility for academic matters, ultimately being responsible for the programs of some 18,000 undergraduate and graduate students across a wide range of disciplines. The Provost and VieePresident (Academic) reports directly to the President and works in close collaboration with the other Vice-Presidents, Deans and other members of the senior management team of the University.

### 7.19 Public Engagement, Office of

www.mun.ca/publicengagement

## Executive Director

Greenwood, R., B.A.(Hons.) Memorial, M.A. York, Ph.D. Warwick
An up-to-date personnel listing is available at www.mun.ca/publicengagement/memorial/contact.php.
The Office of Public Engagement (OPE) reports to the President, and is tasked with supporting the implementation of Memorial University of Newfoundland's Public Engagement Framework by providing supports for public engagement activities, locally, nationally and internationally. The OPE also provides leadership and supports for a range of public engagement-related units and activities within the University and is the lead on strategic external relations for the University. 'Public Engagement' at the University encompasses collaborations between people and groups within the University and people and groups external to the University - i.e., the "public" that further the mission of Memorial University of Newfoundland. Drawing on the knowledge and resources brought by all involved, public engagement involves mutual respect, mutual contributions and mutual benefits for all participants.

### 7.19.1 Alumni Engagement

www.mun.ca/alumni/
An up-to-date personnel listing is available at www.mun.ca/alumni/about.
The Office of Alumni Engagement at Memorial University of Newfoundland exists to foster connections between and among alumni, and between alumni and the University. Alumni Engagement works to create and deliver programs, events, benefits and services that further the strategic priorities of the University and create mutual benefit for alumni and Memorial University of Newfoundland. The Office of Alumni Engagement, Public Engagement maintains a strategic connection to the Office of Development.

### 7.19.2 Harris Centre

www.mun.ca/harriscentre
An up-to-date personnel listing is available at www.mun.ca/harriscentre/about/contact.php.
The Leslie Harris Centre of Regional Policy and Development is tasked with coordinating and facilitating the University's educational, research and outreach activities in the areas of regional development and public policy. The Harris Centre works with all faculty, staff, and students as well as all units within the University and serves as a reliable point of access for all stakeholders seeking to work with the University in activities related to regional development and public policy. The Centre interprets regional as all communities and regions in Newfoundland and Labrador, and policy and development includes all issues that affect the ability of communities and regions to be prosperous and sustainable.
The Harris Centre seeks to connect faculty, staff and students with opportunity for practical application in Newfoundland and Labrador while representing the integrity and independence of University research, teaching and outreach. The Centre also provides support for communications, operations, and administration to the Office of Public Engagement and its reporting units.
Further information may be obtained by contacting The Harris Centre by telephone at (709) 864-3143, by e-mail at harriscentre@mun.ca, on through the website at www.mun.ca/harriscentre/.
The Harris Centre is home to Memorial University of Newfoundland's online connecting tool, Yaffle. Further information may be obtained at www.yaffle.ca.

### 7.19.3 Memorial University of Newfoundland Botanical Garden

www.mun.ca/botgarden
An up-to-date personnel listing available at www.mun.ca/botgarden/contact.
The Botanical Garden is an ideal resource for faculty, staff, students, and the public. Located on Mount Scio Road, the Garden is only a five minute drive from Campus, or a twenty minute walk on the Grand Concourse trail. The Botanical Garden strives to spark curiosity and a sense of wonder about the natural world. There are stories to be told and secrets yet to be discovered. The Garden is a university and community space: a place to learn, teach, research, and play. Memorial University of Newfoundland's faculty, staff, students, and the public have utilized the Botanical Garden as a resource for over 30 years. Experienced research staff are available to support research and learning opportunities from all disciplines. Free to Memorial University of Newfoundland students, the Garden is also a great place to step away from studies and be inspired by six acres of display gardens, and a 110 acres of boreal forest, including Oxen Pond, all accessible by trails. Research and learning opportunities are available all year. The Botanical Garden is open to the public from

May-December.

### 7.19.4 Newfoundland Quarterly

www.nqonline.ca
An up-to-date personnel listing is available at www.nqonline.ca/our-team/.
The Newfoundland Quarterly, a journal established in 1901, focuses on the arts, culture, history, industry, and people of Newfoundland and Labrador. The journal is published by Memorial University of Newfoundland, under the auspices of the Office of Public Engagement. The Newfoundland Quarterly can be contacted by telephone at (709) 864-2426, or by email at nfqsub@mun.ca, or through the website at www.nqonline.ca.

### 7.20 Queen's College (Affiliated Institution)

www.queenscollegenl.ca/

## Provost and Vice-Chancellor

Singleton, R., B.A. Memorial, M.Div. King's, Western Ontario, D.Min. Graduate Theological Foundation, Indiana, Ph.D. Foundation House, Oxford

An up-to-date personnel listing is available at www.queenscollegenl.ca/?page_id=1251.
Information regarding Queen's College may be found at General Information, Queen's College.

### 7.21 Registrar, Office of the

www.mun.ca/regoff
www.mun.ca/advice
www.mun.ca/scholarships
www.mun.ca/undergrad

## University Registrar

Nault, T., B.Sc.(Hons.) McMaster, M.Ed. Toronto
An up-to-date personnel listing is available at www.mun.ca/regoff/contact/staff.php.
The Office of the Registrar provides academic support services and systems to prospective and current students. From initial contact, to application, academic advising, registration and graduation, the Office of the Registrar strives to implement continuous improvements to these services and systems. Together with offices at Grenfell Campus and the Marine Institute, the Office of the Registrar serves the University community, including those involved in online learning.
The Academic Advising Centre (AAC) assists students who are at various stages of their academic careers.
Scholarships, Bursaries and Awards administers the undergraduate Scholarships and Awards Program for the University and distributes out-of-province Financial Aid.
Student Recruitment is responsible for the recruitment of undergraduate students from local, national, and international markets. Recruitment efforts include school visits, career fairs, online and social media engagement, and other activities focused on students and their influencers.

### 7.22 Sexual Harassment Office

www.mun.ca/sexualharassment

## Sexual Harassment Advisor

Shortall, R., B.Sc.(Hons.), M.S.W. Memorial, B.S.W. University of British Columbia
An up-to-date personnel listing is available at www.mun.ca/sexualharassment/about/staff.php.
The Sexual Harassment Office implements the Sexual Harassment and Sexual Assault Policy and its related University-Wide Procedures for Sexual Harassment and Sexual Assault Concerns and Complaints aimed at providing a method for the resolution of sexual harassment and sexual assault concerns and complaints which may arise at Memorial University of Newfoundland. The Sexual Harassment and Sexual Assault Policy prohibits sexual harassment and sexual assault by any member of the University community. Any member may address a concern or make a complaint of sexual harassment and sexual assault against another member of the University community. Memorial University of Newfoundland is committed to providing an environment that is free of all forms of sexual harassment and sexual assault. The services of the Sexual Harassment Office are available to all campuses of Memorial University of Newfoundland. A copy of the Policy and its related University-Wide Procedures for Sexual Harassment and Sexual Assault Concerns and Complaints is available at www.mun.ca/policy/site/category.php.

### 7.23 Technical Services, Department of

www.mun.ca/research/resources/ts
Director
Meaney, R., B.Eng., M.Eng. Memorial, P.Eng.
An up-to-date personnel listing is available at www.mun.ca/research//resources/ts/contacts.php.
The Department of Technical Services is wholly responsible for developing and maintaining specialized equipment to support research activities. This Department maintains and repairs laboratory equipment, specialized machinery and scientific instruments. With highly trained staff and modern facilities, Technical Services offers expertise in electronics, circuit board development, networking, computer repairs, fumehood certification, biological safety cabinet certification, scientific glassblowing, Computer Numerical Control (CNC) machining, scale model making, mechanical fabrication, and Selective Laser Sintering (SLS). The Department also operates a cryogenics facility to supply liquid nitrogen and liquid helium required by the scientific community at Memorial University of Newfoundland. The employees of Technical Services work closely with researchers to develop and build custom apparatus and prototypes.

### 7.24 University Library

www.library.mun.ca/qeii/aboutus

## University Librarian

Cleyle, S.E., B.A. Mount Allison, M.L.I.S. Dalhousie
An up-to-date personnel listing is available at www.library.mun.ca/aboutus/contactus/allstaff.
Information regarding the University Library may be found at General Information, University Library.

### 7.25 Vice-President (Administration and Finance), Office of the

www.mun.ca/vpadmin
Vice-President (Administration and Finance)
Decker, K., B.Comm.(Hons.) Memorial, C.A.
An up-to-date personnel listing is available at www.mun.ca/vpadmin/contacts.
The Vice-President (Administration and Finance) leads the administrative portfolio of the University which includes the functional areas of Ancillary, Facilities, Finance, Human Resources, Information Management and Technology, and Risk.

### 7.26 Vice-President (Grenfell Campus), Office of the

www.grenfell.mun.ca/Departments/Pages/Administration-and-Governance/Vice-President.aspx

## Vice-President (Grenfell Campus)

Keshen, J., B.A., Ph.D. York, M.A. Carleton
An up-to-date personnel listing is available at www.grenfell.mun.ca/campus-services/Pages/Directory.aspx.
Working in close collaboration with the other Vice-Presidents and members of the senior management team of the University, the VicePresident (Grenfell Campus) reports directly to the President and serves as the chief academic and administrative officer of the Grenfell Campus. The Vice-President (Grenfell Campus) is responsible for providing academic and administrative leadership to the Grenfell Campus and its 1,350 students, approximately 300 faculty and staff and 19 degree programs

### 7.27 Vice-President (Marine Institute), Office of the

www.mi.mun.ca/vpoffice

## Vice-President (Marine Institute)

Blackwood, G., B.Sc.(Hons.), M.A. Memorial
An up-to-date personnel listing is available at www.mi.mun.ca/departments.
Working in close collaboration with the other Vice-Presidents and members of the senior management team of the University, the VicePresident (Marine Institute) reports directly to the President and serves as the chief academic and administrative officer of the Marine Institute Campus.

### 7.28 Vice-President (Research), Office of the

www.mun.ca/research
Vice-President (Research)
Bose, N., B.Sc., Ph.D. Glasgow


An up-to-date personnel listing is available at www.mun.ca/research/about/contact-info.
The Office of the Vice-President (Research) is responsible for promoting and enhancing the University's broad range of research activities. Specific priorities for the Vice-President (Research) include: supporting research across all academic disciplines ranging from fundamental to applied research; building partnerships and identifying collaborative opportunities with other universities, research organizations and industry in Canada and elsewhere; working within the University's strategic direction to develop and maintain top quality research infrastructure, space, equipment, etc to assist in attracting and retaining the brightest researchers from the national and international markets; attracting more research funds to Memorial University of Newfoundland and other research organizations in the Province; providing leadership in the execution of the University's Strategic Research Intensity Plan and Research Strategy Framework documents; enhancing the dissemination, application and commercialization of research results generated at the University; championing Memorial University of Newfoundland's Innovation Initiative and strengthening the University's entrepreneurship activities and incubator support, identifying and celebrating research success and excellence; building the University's international reputation for critical research, innovation and knowledge creation; and increasing levels of Indigenous research, establishing methods to ensure there is appropriate consultation and engagement with Indigenous communities and government leaders prior to and during the initial stages of research proposals on both community-identified and researcher-led initiatives.

## 8 GeneralInformation

Memorial University of Newfoundland is the only university in Newfoundland and Labrador. It has campuses in St. John's and in Corner Brook, as well as Harlow, England.

### 8.1 The Beginning

Memorial University College was established as a memorial to the Newfoundlanders who had lost their lives on active service during the First World War; it was later rededicated to also encompass the province's war dead of the Second World War. The College opened its doors on the old Parade grounds in St. John's to a total student body of 55 on September 15, 1925.

### 8.2 University Status

The elevation of the College to the full status of a university was one of the priorities of the first post-Confederation Government. At the initial session of our Provincial House of Assembly, July 13, 1949, the intention of the Government of the day was conveyed by the then Lieutenant-Governor, the Honourable Sir Albert Walsh, in these words from the Speech from the Throne:
"It is considered that Newfoundland should have her own degree-conferring University and you will be invited to consider legislation which would confer upon the Memorial University College the status of a university. It is planned to widen and improve the functions, and thus increase the public usefulness of this institution created originally in honour of our illustrious dead of the First World War."

Royal assent was given the Bill creating The Memorial University of Newfoundland on August 13, 1949, exactly one month to the day from the opening of the House. The Board of Regents and the Senate were inaugurated in May 1950, and the first Convocation of the University was held on June 3, 1950, when the first degrees were awarded.

### 8.3 A Period of Expansion

With university status, Memorial University of Newfoundland entered a period of rapid growth that was to continue into the 70 s. In 19491950, there was a student body of 307 in the new university; in the academic year 1961-1962, when the university moved to its present St. John's campus, the student enrolment had reached 1,745 full-time and 152 part-time. Ten years later, 1971-1972, the student population, including full- and part-time students in degree programs, was 10,980.
During this time there were equally dramatic changes in the variety and extent of available academic programs. In the early years of the university, there were two faculties (Arts and Science, and Education). While the academic structure was quite similar in 1961, when the university moved to its new campus on Elizabeth Avenue in St. John's, areas of instruction, course offerings and degrees awarded had all increased.
In 1966 the Board of Regents approved the establishment of a small residential campus in the quaint, historic town of Harlow, Essex, located approximately midway between London and Cambridge. The first Memorial University students came to Harlow in 1969 for education and engineering one-semester internships in Harlow schools and factories. Harlow Campus went through extensive modernisation in 2002 to meet the needs of today's undergraduate and graduate students. For more information, visit www.mun.ca/ harlow.
In 1975 Memorial University of Newfoundland established a regional campus in Corner Brook. The campus was named Sir Wilfred Grenfell College in 1979 honouring the memory of the medical missionary who pioneered medicine in Northern Newfoundland and along the coast of Labrador. In 2010 the campus in Corner Brook was renamed Grenfell Campus, Memorial University of Newfoundland. Since its opening, Grenfell has evolved from a junior college offering first- and second-year courses to providing entire degree programs in the areas of arts, fine arts, science, business administration, resource management and nursing. The first degrees, in the disciplines of theatre and visual arts, were introduced in 1988. Grenfell Campus currently offers 18 undergraduate and one graduate degree programs. For more information, visit www.grenfell.mun.ca.
In 1992 the Marine Institute joined the University, becoming the Fisheries and Marine Institute of Memorial University of Newfoundland. Founded in 1964, the Marine Institute offers a range of certificate, diploma, undergraduate and graduate degree programs in the ocean and marine sectors and is involved in research and technology transfer. For more information, visit www.mi.mun.ca.
Today, Memorial University of Newfoundland offers more than 100 undergraduate and graduate degree programs through seven faculties - Business Administration, Education, Engineering and Applied Science, Humanities and Social Sciences, Medicine, Nursing, and Science; eight schools - Arts and Social Science, Fine Arts, Graduate Studies, Human Kineties and Recreation, Music, Pharmacy, Science and the Environment, and Social Work; and the academic units at the Marine Institute. Information regarding enrolment statistics can be found in the Fact Book at www.mun.ca/ciap/Analysis/Factbook.
The University's three frameworks - teaching and learning, research and public engagement - guide the University's development.
The teaching and learning community at Memorial University of Newfoundland connects learners and educators to each other, the broader community and the world, in the service of knowledge generation and exchange, and the advancement of society. For more information, visit blog.citl.mun.ca/teachingandlearning/.
Faculty and students actively participate in research and development. Memorial University of Newfoundland is one of the most important research facilities in Atlantic Canada and has developed numerous research programs and facilities that are among the most advanced in the world. For more information and a complete listing of research facilities, visit www.mun.ca/research.
Memorial University of Newfoundland is also one of the most publicly engaged universities in the country, undertaking projects that benefit both the university and the community. The University encourages and provides support for public engagement through faculties, units and centres that offer programming to help facilitate public engagement, through funding for public engagement, and through the Public Engagement Framework. For more information, visit www.mun.ca/publicengagement.

### 8.4 The Campuses

Memorial University of Newfoundland, positioned on the edge of the North Atlantic, is one of the largest universities on Canada's East Coast and the only university in the Province of Newfoundland and Labrador. There are four campus locations in the Province and one abroad.

### 8.4.1 St. John's

www.mun.ca
Spanning approximately 220 acres, Memorial University of Newfoundland's largest Campus is home to extensive facilities that support a full range of academic programs in a modern, urban setting. Memorial University of Newfoundland offers access to the best in research, teaching and learning, and public engagement, providing world-class opportunities and contributing expertise and insight both locally and globally.
On the Campus to the south of Prince Philip Drive are the Arts and Administration, Science, Chemistry-Physics, Education (G.A. Hickman), Mathematics (Henrietta Harvey), Physical Education, Biotechnology, Facilities Management and Music (M.O. Morgan) buildings; as well as the Queen Elizabeth II Library, Bruneau Centre for Research and Innovation, Paton College and Macpherson College residence complexes, Burton's Pond Apartments, Campus Childcare Centre, and The Works recreation complex, comprising the Aquarena, Field House and other sports and recreation facilities on Campus. Spanning Prince Philip Drive is the University (Smallwood) Centre, containing student services and student union operations, as well as recreation and dining facilities.
North of Prince Philip Drive are the Health Sciences Centre, incorporating the Faculty of Medicine, the Faculty of Nursing, the School of Pharmacy and Eastern Health; the Engineering (S.J. Carew), Earth Sciences (Alexander Murray), Business Administration, and CCORE (Captain Robert A. Bartlett) buildings, St. John's College, Coughlan College, Queen's College and Spencer Hall. Slightly further north is the Memorial University of Newfoundland Botanical Garden.
The Ocean Sciences Centre is located to the west at Logy Bay. In 2013 the University acquired the former Battery Hotel property in St. John's and planning for the facility is ongoing. The Battery will be established primarily as a public engagement facility to further connect the University with the community. The first residence rooms for graduate students at the Battery opened in September 2015. For more information visit www.mun.ca.

### 8.4.2 Fisheries and Marine Institute

www.mi.mun.ca
The Fisheries and Marine Institute, headquartered on Ridge Road in St. John's, is Canada's leading centre of education, training, applied research and technology transfer for the ocean industries. As a Campus of Memorial University of Newfoundland, the Marine Institute offers undergraduate and graduate degrees, advanced diplomas, diplomas of technology, certificates in such fields as marine transportation, food and water quality, naval architecture, aquaculture, underwater vehicles, ocean mapping, marine environmental, marine studies, technology management, and maritime management.
The Institute has a number of state-of-the-art centres and units, including the Offshore Safety and Survival Centre (OSSC), the Safety Emergency and Response Training Centre (SERT), the Centre of Marine Simulation (CMS), the Centre for Aquaculture and Seafood Development (CASD), MI International, the Centre for Sustainable and Aquatic Resources (CSAR), the Community Based Education Delivery Unit (CBED), the Centre for Fisheries Ecosystems Research (CFER) and the Centre for Applied Ocean Technology (CTec). These areas lead the institute in applied research and technology transfer and also provide training to a variety of industry clients. For more information, visit www.mi.mun.ca.

### 8.4.3 Grenfell Campus

www.grenfell.mun.ca
Grenfell Campus, Memorial University of Newfoundland, stands on a 185-acre site with a spectacular view of the city of Corner Brook and the Bay of Islands. With a student population of about 1,250, Grenfell Campus offers a personalized education through a wide variety of interdisciplinary experiences. Students may choose from undergraduate degrees in arts, business administration, fine arts, education, nursing, science or resource management. Grenfell also offers a master of arts degree in environmental policy and a master of science degree in boreal ecosystems and agricultural sciences.
Located on University Drive, Grenfell Campus comprises five academic buildings. The Arts and Science Building houses administrative offices, academic classrooms and labs, recreational facilities, a bookstore, the Campus's original student residence, and one of the largest astronomical telescopes in Atlantic Canada. The Fine Arts Building features facilities for theatre and visual arts programs. The Library and Computing Building contains Ferriss Hodgett Library, a computer lab and lecture hall facilities. The Forest Centre houses office, classroom, lab and lecture space, as well as the Atlantic Division offices of the Canadian Forest Service (Natural Resources Canada). Annexed to the Forest Centre is a boreal ecosystem research facility, which supports research in agricultural, environmental and boreal sectors.
In addition to the original dormitory-style residence, student housing has been expanded to include eight chalet-style apartment buildings and a residence complex; about half the student population at Grenfell resides on Campus. The GCSU Student Centre, an annex to the Arts and Science Building, provides dining and recreational space for the student population, as well as office space for the Grenfell Campus Student Union. For more information, visit www.grenfell.mun.ca.

### 8.4.4 Harlow Campus

www.mun.ca/harlow
Harlow Campus is the international Campus of Memorial University of Newfoundland, one of only two universities in Canada with Campus facilities in the United Kingdom. Professional schools and academic departments at Memorial University of Newfoundland use Harlow Campus in Essex, UK, to deliver ongoing and specialized one-time programming, internships and experiential learning. The Campus provides technologically equipped meeting facilities and residence accommodations for up to 51 people.
Harlow Campus consists of a group of converted 19th century and older buildings. The main building is The Maltings (once used to dry grain), which now houses the administration offices and accommodations for residents. It also contains a dining room, library and computer suite, common room, laundry room and the Lord Taylor lecture room. Other Campus buildings include Cabot House, St. John's House, St. John's Cottage, and 44-46 Market Street. Faculty-led courses are offered at Harlow at varying times. Visit www.mun.ca/harlow for more information.

### 8.4.5 Signal Hill Campus

www.mun.ca/signalhill
www.mun.ca/signalhill/engage
Memorial University of Newfoundland's newest location, Signal Hill Campus, officially opened its doors in September 2018. With a focus on public engagement and innovation, the initial tenants, programming and partnerships based at the University's iconic new location will help address 21st century issues by connecting the expertise and ideas of the University's students, faculty, staff and retirees, and the people and organizations of Newfoundland and Labrador.
The tenants in the Campus' Emera Innovation Exchange facility include flagship publicly engaged units, including the Gardiner Centre, Genesis, the Harris Centre of Regional Policy and Development, the Newfoundland Quarterly and the Office of Public Engagement, along with the Memorial University of Newfoundland Pensioners' Association, and the community organization Business and Arts NL. Also located at Signal Hill Campus are graduate student accommodations and a bookable high-tech conference and meeting centre.
Building on that history and excellence in public engagement, Signal Hill Campus opened in September 2018 with the launch of the Emera Innovation Exchange facility, a hub for public engagement and innovation, housing several public-facing Memorial University of Newfoundland tenants, graduate student accommodations, and a bookable high-tech conference and meeting centre.

### 8.5 Vision, Mission, and Core Values of the University

In 2013 the University adopted:

## Vision

Memorial University will be one of the most distinguished public universities in Canada and beyond, and will fulfil its special obligations to the people of Newfoundland and Labrador.

## Mission

Memorial University is an inclusive community dedicated to innovation and excellence in teaching and learning, research, scholarship, creative activity, service and public engagement. Memorial welcomes and supports students and scholars from all over the world and contributes knowledge and expertise locally, nationally and internationally.

## Core Values

- Excellence

Encouraging and promoting excellence through innovation and creativity, rigour and pragmatism.

- Integrity

Being honest and ethical in all interactions, maintaining the highest ethical standards in teaching, research, public engagement and service.

- Collegiality

Engaging others with respect, openness and trust in pursuit or a common purpose, having regard for individuals, ideals and the institution as a whole.

- Inclusiveness and Diversity

Embracing and acting on responsibility to guarantee diversity and equity.

- Responsiveness

Being receptive to individuals and communities.

- Accountability

Accepting responsibility for achievement of common goals and objectives.

- Freedom and Discovery

Supporting the freedom to pursue knowledge that is based on individual and collective intelligence, curiosity, ingenuity and creativity.

- Recognition

Acknowledging, tangibly, all aspects of university enterprise including teaching and learning, research, scholarship, creative activity and public engagement.

- Responsibility to Place

Valuing and fulfilling the special obligations to the people of Newfoundland and Labrador by supporting and building capacity for excellence that:

- addresses needs and opportunities for Newfoundland and Labrador;
- engages the university community on matters of national and international significance;
- produces and delivers academic programs of national and international calibre; and
- recognizes the dynamic opportunities presented by a multi-campus institution.
- Responsibility to Learners

Recognizing students as a first priority and providing the environment and support to ensure their academic and personal success.

- Interdisciplinary Collaboration

Supporting overarching themes in all pursuits that cut across academic units and address significant opportunities and challenges for which Memorial is particularly well positioned to build nationally and internationally recognized capacity.

- Sustainability

Acting in a manner that is environmentally, economically and socially sustainable in administration, academic and research programs.

### 8.6 Presidents of Memorial University College

1925-1933 John Lewis Paton 1933-1949 Dr. Albert G. Hatcher

### 8.7 Presidents of the University

## 1949-1952 Dr. Albert G. Hatcher

1952-1966 Dr. Raymond Gushue
1966-1967 M.O. Morgan (pro tempore)
1967-1973 The Rt. Hon. the Lord Taylor of Harlow
1973-1981 Dr. M.O. Morgan
1981-1990 Dr. Leslie Harris
1990-1999 Dr. Arthur W. May
1999-2007 Dr. Axel Meisen
2007-2009 Dr. H.E.A. (Eddy) Campbell (Acting)
2009-2010 Dr. C. Loomis (pro tempore)
2010 - Present Dr. G. Kachanoski

### 8.8 Chancellors of the University

1952-1961 The Rt. Hon. Viscount Rothermere of Hemsted
1961-1968 The Rt. Hon. Lord Thomson of Fleet
1971-1979 Dr. G. Alain Frecker
1979-1988 Dr. Paul G. Desmarais
1994-2008 Hon. Dr. John C. Crosbie
2008-2012 Dr. Rick J. Hillier
2012 - Present Dr. Susan Dyer Knight

### 8.9 Chairs of the Board of Regents (Established May, 1950)

1950-1954 Hon. Sir Albert Walsh<br>1954-1968 Dr. Edmund J. Phelan<br>1968-1974 Hon. Dr. Gordon A. Winter<br>1974-1982 Hon. Dr. Frederick Russell<br>1982-1991 Dr. Charles White<br>1991-1997 Dr. Janet Gardiner<br>1997-2002 Dr. Edward Roberts<br>2002-2003 Chris Decker<br>2003-2004 Dr. Georgina Hedges (pro tempore)

2004-2006 Lorne Wheeler
2005-2007 Dr. Georgina Hedges (pro tempore)
2007-2008 Gilbert Dalton
2008-2012 Dr. Robert Simmonds
2012 - Present Iris Petten

### 8.10 University Constitution

The Constitution of the University is embodied in an Act of the House of Assembly of Newfoundland entitled An Act Respecting the Memorial University of Newfoundland, Chap. 231, Revised Statutes of Newfoundland (as amended). The Act delineates the authority and the functions of the University and its parts, as follows:

There shall be a university which shall be called the Memorial University of Newfoundland, consisting of a Chancellor, Convocation, Board of Regents, Senate, Faculty Councils and the Faculties and which shall be a body politic and corporate. No other university having corporate powers capable of being exercised within Newfoundland shall be known by the same name, nor shall any other university have power to grant degrees.
The University shall have full power and authority from time to time and at all times to establish and maintain such faculties, colleges, schools, institutions, departments, chairs and courses as to the Board of Regents may seem meet, and to give instructions and training; to grant degrees, including honorary degrees, diplomas and certificates of proficiency; to provide facilities for the prosecution of original research in every branch of knowledge and learning and to conduct and carry on such research work; and generally, to promote and carry on the work of a university in all its branches.

### 8.10.1 The Board of Regents

## www.mun.ca/regents

The management, administration and control of the property, revenue, business and affairs of the University are vested in a Board of Regents, consisting of:

1. three ex-officio members
a. the Chancellor of the University
b. the President of the University
c. the Vice-President of the University who is the Pro Vice-Chancellor:
2. six members elected by the Alumni Association of the University;
3. seventeen members appointed by the Lieutenant-Governor-in-Council; and
4. four members appointed by the Lieutenant-Governor-in-Council being full-time students of the University who
a. meet the requirements set out in the regulations, and
b. are recommended to the Lieutenant-Governor-in-Council by the board following the recommendation to the board of one candidate each from the following student unions:
i. the Memorial University of Newfoundland Students' Union,
ii. the Graduate Students' Union,
iii. the Marine Institute Students' Union, and
iv. the Grenfell Campus Students'Union.

### 8.10.2 The Senate

www.mun.ca/senate


Matters of an academic character are in general charge of the Senate of the University, consisting of the following:

1. The Chancellor of the University;
2. ex-officio members who shall be
a. the President of the University, who shall be the chairman thereof,
b. the Vice-President (Academic) of the University, who shall be the deputy chairman thereof,
c. the Deputy Minister of Education or a representative of the Deputy Minister,
d. the Vice-President of the Grenfell Campus,
the Deans of the Faculties of the University,
f. the Dean of Graduate Studies,
the University Librarian,
the University Registrar, and
such other persons holding office within the University or in any of the campuses or institutions affiliated with the University chosen in such number and manner as may be approved by the Board;
3. such members from the academic staff of the Faculties and Professional Schools of the University, exclusive of any person who is a member by virtue of paragraph 2., elected in such number and manner as may be approved by the Board, but the number elected under this paragraph shall be not less than twice the number of members named or chosen under paragraph 2.; and
4. thirteen members from the students in attendance at the University, including at least one student from the Marine Institute, one graduate student and one student from Grenfell Campus with all members to be chosen in a manner approved by the Board.

### 8.10.3 Convocation

## www.mun.ca/convocation

Convocation of the University, as provided in the Act, is composed of the Chancellor, the President, the Senate, the Board of Regents, all persons who are graduates of the Memorial University College, all persons holding academic appointments with the University whose names are added to the roll of the Convocation by the Registrar of the University from time to time upon instructions from the President, and all persons who have become graduates of the University. The functions of Convocation are chiefly elective, but it may also consider all questions affecting the well-being and prosperity of the University and make representations from time to time on such
questions to the Senate, which shall consider the same and return to the Convocation its conclusions thereon.

### 8.10.4 Affiliation

The Act provides that, subject to the approval of the Lieutenant-Governor-in-Council, the University may affiliate with any college or institution established in the province for the promotion of Arts and Science, or for instruction in Law, Medicine, Nursing, Education, Engineering, Agriculture or in any other useful branch of learning, and to dissolve any such affiliation. The institution which has become affiliated with the University under this provision is Queen's College, St. John's.

### 8.11 Academic Dress

The academic dress for matriculated undergraduates of the University shall be similar to the Scholar's gown of the University of Oxford. It shall be worn whenever the President so directs.
The gowns of the Bachelors shall be of black stuff. The gowns of the Masters shall be of black stuff or silk. The gowns of the Doctors shall be of fine scarlet cloth or silk, or of black stuff or silk.
The pattern of the Bachelor's gown shall be similar to that of the Oxford Bachelor's gown. The pattern of the Master's gown and the Doctor's black gown shall be similar to that of the Oxford Master's gown, except that the Doctor's gown shall have an edging of black silk braid at the opening of the sleeve. The Doctor's scarlet gown shall be similar to that of the Oxford Doctor of Divinity's gown.
The hoods of the Bachelors shall be made of black stuff, the hoods of the Masters of black silk, and the hoods of the Doctors of scarlet silk. They shall be full in shape and lined with the University colours of claret and white. The hoods of the Bachelors shall be trimmed with white fur, the tippets with velvet in the colours distinctive of the Faculty or Degree. The hoods and tippets of the Masters shall be edged with velvet in the colours distinctive of the Faculty or Degree. The hoods and tippets of the Doctors shall be edged with silk in the colours distinctive of the Faculty or Degree; however, the hood of the Doctor of Philosophy shall be of claret silk, lined and edged with claret silk.
The University hood, worn by official representatives of Memorial University of Newfoundland participating in ceremonies, shall be made of black stuff, and lined and edged with claret and white silk.
The distinctive colours for the degrees shall be:
B.A., M.A., M.G.S. - White
B.B.A., B.Comm., B.Comm.(Co-op.), I.B.B.A., M.B.A., M.O.G.S., M.Sc.M. - Tan
B.Ed., B.Ed.(Elementary), B.Ed.(Intermediate/Secondary), B.Ed.(Native and Northern), B.Ed.(Primary), B.Ed.(Post-Secondary), B.Ed. (Primary/Elementary), B.Mus.Ed., B.Sp.Ed., B.Voc.Ed., M.Ed - Light Blue
B.Eng., M.Eng., M.E.M. - Orange
B.F.A.(Theatre), B.F.A.(Visual Arts) - Amethyst
B.Kin., B.Kin.(Co-op.), B.P.E., B.P.E.(Co-op.), B.Rec., B.Rec.(Co-op.), M.P.E., M.Sc.(Kinesiology) - Sage Green
B.M.S., B. Tech, M.M.M., M.M.S.(Fisheries Resource Management), M.T.M. Navy Blue
B.Mus., M.Mus. - Pink
B.N., M.N. - Coral
B.R.M. - Citron
B.Sc., M.A.S., M.A.Sc., M.A.S.P.(Co-op), M.Env.Sc., M.Sc., M.Sc.(B.E.A.Sc.), M.A.P.S.(Co-op), Psy.D. - Gold
B.Sc.(Pharmacy), M.Sc.(Pharmacy), Pharm.D. - Clover
B.S.W., M.S.W. - Ruby Gem
M.D., M.P.H., M.Sc.(Medicine), M.H.E. - Green
M.A.Ed. (Education Francophone Literatures and Cultures), M.E.R. - Chocolate Brown
M.Phil., Ph.D. - Claret
M.W.S. - Purple

The caps of Bachelors and Masters shall be black and of the square shape, with black tassel. The caps of the Doctors shall be similar to the Oxford Doctor's bonnet.
The academic dress for the Officers of the University shall be as follows:
Chancellor - a silk gown heavily embroidered with gold braid
Vice-chancellor - a silk gown embroidered with gold braid
Pro vice-chancellor - a silk gown embroidered with gold braid
Registrar and other Officers of the University gowns of a pattern approved by Senate

### 8.12 Queen's College

www.queenscollegenl.ca,

### 8.12.1 Faculty of Theology

Queen's College, founded in 1841, is an Associate Member of The Association of Theological Schools in the United States and Canada and is affiliated with Memorial University of Newfoundland. It has a Faculty of Theology which offers courses in theology and in professional training for ministry. Under Legislative authority it confers the degrees of Master of Divinity, Master of Theological Studies, Master of Theology, and Bachelor of Theology and grants a Diploma in Theology and Ministry and an Associate in Theology.
Further information may be obtained by contacting the College in writing to The Registrar, Queen's College, St. John's, NL, A1B 3R6, or by telephone to (709) 753-0116, (877) 753-0116 (toll free), by fax to (709) 753-1214, by e-mail to queens@mun.ca or through the website at www.queenscollegenl.ca.

### 8.13 University Library

www.library.mun.ca/qeii/aboutus
With eight branches, Memorial University of Newfoundland Libraries is one of Atlantic Canada's largest university libraries. In addition to providing access to millions of physical book and digital access to e-books, journals, and other resources, the libraries house several specialized archives and collections, including the largest collection of published materials about Newfoundland and Labrador in the world in the Centre for Newfoundland Studies.
The Libraries encourage innovation and excellence in the University's teaching and learning, research, scholarship, creative activity, service and public engagement.
INTG 1000 Academic Integrity, a course offered by the University Library, introduces students to the concept of academic integrity and
the important role it plays at Memorial University of Newfoundland. Students complete online modules on a variety of topics including: understanding the meaning of academic integrity and its associated university regulations; how to complete university work with academic integrity; and how to avail of supports to ensure academic integrity. Normally, INTG 1000 is completed by week 7 of a student's first semester. This course is mandatory for all undergraduate students new to Memorial University of Newfoundland. Registration in subsequent semesters is dependent upon successful completion of this course. This course is offered only online and has a credit hour value of 0 . INTG 1000 is the same as the former INTG 100A/B.

### 8.13.1 Dr. C.R. Barrett Library

www.library.mun.ca/mi
An up-to-date personnel listing is available at www.library.mun.ca/mi/contactus.
The Dr. C.R. Barrett Library is located on the main floor of the Fisheries and Marine Institute. It offers a comprehensive range of library services to students, faculty, and staff at the Fisheries and Marine Institute and to the Newfoundland and Labrador marine industries.
The Library collection supports study and research in fisheries and aquaculture, marine engineering, nautical science, and the aquatic environment.
Library holdings include print and electronic books, technical reports, journal subscriptions, reference sources, audiovisual materials as well as ships drawings.

### 8.13.2 Education Library and Commons

www.library.mun.ca/edu
An up-to-date personnel listing is available at www.library.mun.ca/edu/contactus.
The Education Library and Commons are located in the Faculty of Education, G.A. Hickman Building on the second and fifth floors respectively. With seating for 100, the library's reading room, study centres, and comfortable seating area are all collaborative spaces. Individual study carrels, computer carrels, and an interactive whiteboard workspace complete the public areas.
Library collections include 15,000 current and superseded curriculum resources authorized for use in Newfoundland and Labrador schools, and 20,000 children's literature print books and electronic resources. Specialized collections, including the textbook archive, and a test library of assessment instruments, are restricted for use by students and faculty completing coursework and research with these materials.
The Teaching \& Learning Commons is a technology-rich collaborative learning space designed with contemporary classroom computer equipment and modular furniture. Assistance Is available for faculty, staff and students requiring technical help. With seating for 60 , the flexible spaces, group work, and presentation practice areas are well appointed with hardware and software specific to the needs of Faculty of Education undergraduate and graduate students.

### 8.13.3 Ferriss Hodgett Library

## www.library.mun.ca/grenfell

An up-to-date personnel listing is available at www.library.mun.ca/grenfell/contactus.
The Ferriss Hodgett Library is located on levels 2 and 3 of the Library \& Computing Building, Grenfell Campus, with seating for 203 users and includes group study rooms, audio-visual and computer carrels. The Library holds over 100,000 books and 450 current subscriptions, along with collections of audiovisual materials, government documents, microforms, periodicals, and access to many ejournals. A full range of public services is available including reference assistance, orientation tours and interlibrary loans, as well as access to electronic Information resources, Internet, spreadsheet, word processing, and presentation software.
Additional information regarding the Ferriss Hodgett Library is available in the Grenfell Campus section of the University Calendar at Grenfell Campus, Library.

### 8.13.4 Health Sciences Library

www.library.mun.calhsl
An up-to-date personnêl listing is available at www.library.mun.ca/hsl/contactus/staff.
The Health Sciences Library (HSL) is located on the ground floor of the Health Sciences Centre on the north Campus of the University. The HSL searches the world's biomedical literature in support of clinical, teaching, and research interests.
The Health Sciences Library has a collection of over 40,000 (print and electronic) books on medicine, nursing, pharmacy, dentistry, and allied health subjects and subscribes to more than 1700 print and electronic journals. It maintains numerous relevant databases, electronic resources, and audio-visual items to support academic pursuits and clinical care.

### 8.13.5 Queen Elizabeth II Library

www.library.mun.ca/qeii/aboutus
Up-to-date personnel listings are available at www.library.mun.ca/qeii/contactus.
The Queen Elizabeth II Library (QEII) is one of Atlantic Canada's largest university libraries. In addition to providing access to millions of physical books and digital access to e-books, journals, and other resources, the QEll Library houses several specialized archives and collections, including those of the Centre for Newfoundland Studies - holders of the largest collection of published materials about Newfoundland and Labrador in the world.
The QEII Library is also home to The Commons - a collaborative digital and study space and access to computers tutoring, assistive technology, a Digital Media Centre for graphic and video design programs, and a makerspace for creating, inventing, and tinkering. Surrounding The Commons is the First Space Art Gallery which hosts an array of diverse exhibits throughout the year that are sure to inspire all those who use the Library's services.
The QEII Library has a variety of quiet, social and group study spaces available to all students. Librarians and library staff are on hand to help empower the research process and support academic goals.

## 9 Centre for Innovation in Teaching and Learning (CITL)

www.citl.mun.ca
Associate Vice-President, Teaching and Learning, and Director
Watson, G., B.A.Sc. Guelph, M.E.S., Ph.D. York
An up-to-date personnel listing is available at www.citl.mun.ca/about/Contacts.php.
The Centre for Innovation in Teaching and Learning (CITL) provides teaching and learning support to Memorial University of Newfoundland across all Campuses and online. CITL leads the delivery of online courses and programs, professional development for educators, and the use of educational media and technologies for teaching and learning. The Centre also partners with internal and external individuals and groups to meet education-related goals, facilitate research, and provide the wider community with access to University events and opportunities.
Through its activities CITL serves students and educators on all of the University's Campuses, and connects students across the Province, Country and around the world who have limited educational opportunities, or who seek flexibility in education delivery. The Centre also enhances, promotes and supports an e-learning vision throughout the Institution. CITL provides Faculties and Schools with the e-learning expertise and knowledge needed to provide an engaging and responsive learning environment for on campus and online courses. A Memorandum of Understanding with Newfoundland and Labrador English School District's Centre for Distance Learning and Innovation (CDLI), which delivers distance education to K-12 students, allows CITL to share knowledge and information and prepare the incoming university student for online learning.

### 9.1 Online Learning

CITL offers close to 500 online undergraduate and graduate courses to over 23,000 course registrants annually. Courses are available in many disciplines with complete undergraduate and graduate degrees available online. These include bachelor degrees in business (Bachelor of Business Administration and Bachelor of Business Administration (Transfer from other post-secondary institutions) Grenfell Campus), education (Bachelor of Education (Post-Secondary) as a First Degree and Bachelor of Education (Post-Secondary) as a Second Degree), maritime studies (Bachelor of Maritime Studies), pharmacy (Doctor of Pharmacy for Working Professionals) and technology (Bachelor of Technology); masters degrees are offered in education (Master of Education (Curriculum Teaching and Learning Studies), Master of Education (Educational Leadership Studies), Master of Education (Educational Technology) and Master of Education (Post-Secondary Studies)), human kinetics and recreation (Master of Physical Education), marine studies (Master of Marine Studies (Fisheries Resource Management), maritime management (Master of Maritime Management), nursing (Master of Nursing), and technology management) (Master of Technology Management (Engineering/Applied Science Technology) and Master of Technology Management (Aquaculture Technology)). Courses are delivered online and use a variety of learning technologies including synchronous and asynchronous virtual classrooms, collaborative tools, blogs, e-portfolios, peer assessments, video assignments and videoconferencing. For a comprehensive listing of all online and mixed-mode programs visit www.citl.mun.ca/learning/programs.php.

### 9.2 Client Services

CITL provides support on campus at service points: G.A. Hickman Building, ED1032; Science Building, SN2104; SJ. Carew Building, EN3012; the Commons in the Queen Elizabeth II Library; and the Teachers' Legacy Rotunda. Online and telephone support is also available seven days a week. When the St. John's Campus is closed unexpectedly, regular online service hours remain in effect with staff providing remote client support. CITL can assist with: accessing online course components; accessing and using educational technologies, including Brightspace and Online Rooms; technical support for hardware/software configuration, embedded multimedia, and creating/editing course blogs; and accessing online student resources. CITL also supports and administers mid-term, final and deferred examinations for online courses, utilizing various invigilation methods including established exam sites and online invigilation. Additionally, to best serve new and returning online students, CITL makes regular and scheduled contact throughout the online experience to effectively engage and retain students. Further information on CITL services may be obtained through the website at www.citl.mun.ca or to the Support Centre at www.citl.mun.ca/support, or by telephone to (709) 864-8700 or toll free to (866) 435-1396.

### 9.3 Course Development and Educational Technology

As an academic support unit, CITL works in coordination with Memorial University of Newfoundland's faculties and schools to identify and develop courses and programs for online delivery. Design and development professionals are paired with content experts from the respective faculties and schools to develop, manage and deliver the University's online offerings. In all its functions, CITL encourages and supports innovative teaching practices through the effective application of instructional technologies both online and on campus. A wide range of professional services in video production, multimedia development, instructional design, lecture capture, and classroom technology are available through CITL and aim to provide faculty with pedagogical enhancements and ultimately increase student engagement. Inquiries may be made by telephone to (709) 864-8700 or (866) 435-1396 (toll free).

### 9.4 Educator Development

CITL supports the University's faculty members, per course instructors, postdoctoral fellows, instructional staff members, and graduate students by providing educator development opportunities that enhance knowledge and skills in teaching. The team supports a collaborative, responsive, and pragmatic approach to developing services and programs related to teaching and learning using a blended format. Among the services provided are professional development experiences and programs for teaching development; individual and small group consultations; and assistance with teaching dossier preparation. Support is given for awards applications as well as other activities and initiatives that recognize excellence in university teaching. Further information on educator development services may be obtained by telephone (709) 864-3028 or by email to educatordev@mun.ca.

## 10 Students' Unions

### 10.1 Memorial University of Newfoundland Students' Union (MUNSU)

The Memorial University of Newfoundland Students' Union Act (1968) incorporated the Students' Union (MUNSU) as the official students' union representing undergraduate students at the University's St. John's campus.
The Students' Union provides a range of advocacy work to improve the lives of its members and increase accessibility of post-secondary education. It lobbies all levels of government and other decision-making bodies and organizes campaigns around these and other issues which are important to the membership. It also provides services to improve the quality of student life: the Attic (Copy Centre, Convenience, and Postal Service), Health and Dental Insurance, SafeDrive / WalkSafe, the Student Handbook/Dayplanner, Breezeway Bar, CHMR-FM radio, and others. The cost of services are partially funded by Students' Union fees paid by each undergraduate student upon registration. MUNSU assists students on an individual basis to resolve student aid issues as well as academic-based problems
and appeals. Through the office of the Director of Advocacy, problems with appeals, assessments, repayment, and general complaints in these areas are addressed. Students who have more serious issues may be referred to the MUNSU legal aid service for one free consultation. These sessions are not considered extended legal counsel.
MUNSU has established and provides funding for a number of Resource Centres on campus: Women's Resource Centre (WRC), International Students' Centre (ISC), Lesbian-Bisexual-Gay-Transgender Resource Centre (LBGT-MUN), MUN DISC (Disability Information and Support Centre), Students Older than Average (SOTA), Student Parents Resource Centre, and the Aboriginal Students' Centre. The Students' Union also operates over 200 student clubs organized around a wide range of academic and extracurricular activities.
The Students' Union is a member local of the Canadian Federation of Students (CFS) representing over half a million students across Canada. Further information may be obtained from the website at www.munsu.ca.

### 10.1.1 Students' Union Fee

All full-time and part-time undergraduate and graduate students of the University pay compulsory fees to their respective students' unions (MUNSU or GSU) and all students, upon registration, automatically become members of either MUNSU, the undergraduate students' union, or GSU, the graduate students' union.

### 10.2 Grenfell Campus Student Union (GCSU)

Information regarding the Grenfell Campus Student Union (GCSU) is available under Grenfell Campus Student Union on the Grenfell Campus website.

### 10.3 Marine Institute Student Union (MISU)

Information regarding the Marine Institute Student Union (MISU) is available under Student Information on the Marine Institute website.

### 10.4 The Graduate Students' Union (GSU)

The Graduate Students' Union (GSU) at Memorial University of Newfoundland is an organization run for graduate students by graduate students. Founded in 1967, the GSU is one of Canada's oldest independently incorporated graduate student governments. Every graduate student at the University becomes a member of the GSU upon registration. Presently, the graduate student body consists of over 3000 full and part-time students, thereby comprising more than $10 \%$ of the total student population at Memorial University of Newfoundland.
The Graduate Students' Union has two main functions: 1) to represent and protect the interests of the graduate students at all levels of university governance, and 2) to help enhance the quality of graduate student life at Memorial University of Newfoundland. Graduate student fees provide the GSU with an annual operating budget. These fees are used to run the GSU office, help finance social and academic events for graduate students, provide conference aid for students presenting at conferences, and to cover other operating expenses.
The Graduate Students' Union is run by a Board of Directors consisting of the five GSU Executive officers and one student representative from each academic unit with a graduate program. Additionally, graduate students who sit on various university committees regularly attend. The Board meets once a month to assist the Executive in guiding the development and direction of the organization. The Board meetings also give students a chance to raise concerns from their individual departments and in return, to receive advice or suggestions on problem solving. These meetings are the main line of communication between the Executive officers and the graduate student population at the University. It is for this reason, that the GSU needs an active and interested Board of Directors. Graduate students who are interested in getting involved are always welcome, and should speak to their department representative, or contact the GSU office.
The Graduate Students' Union is located in Feild Hall on the north side of campus. Operated by the GSU, Feild Hall is comprised of four floors: the top two floors for a graduate student residence, one floor for departmental graduate student offices and GSU offices, and the ground floor for Bitters - Restaurant and Lounge, the pub owned and operated by the GSU.
The Graduate Students' Union general office is located on the second floor of Feild Hall in room GH 2007. Office hours are posted outside the office door, on the answering service, and the website. You can reach the GSU by phone to (709) 864-4395, by fax at (709) 864-3395, by email to gsu@gsumun ca, or by writing to Graduate Students' Union, Feild Hall, GH2007, 216 Prince Philip Drive, St. John's, NL, A1B 3R5. Further information about the GSU can be obtained from the website at www.gsumun.ca/.

## 11 Special Divisions and Separately Incorporated Entities

### 11.1 Canadian Centre for Fisheries Innovation (CCFI)

## www.ccti.ca

## Managing Director

Verge, R., B.Eng. NSTC, M.B.A. York, P.Eng., CA, CMC
For up-to-date listings of pêrsonnel and the Board of Directors see www.ccfi.ca/staff.asp and www.ccfi.ca/board.asp, respectively.
Located at the Fisheries and Marine Institute, the Canadian Centre for Fisheries Innovation is owned by Memorial University of
Newfoundland. The Centre provides scientific research and technical services to the fishery and aquaculture. Working closely with the faculty and staff of the region's universities and technical institutes, the Centre provides expert assistance in the areas of aquaculture, harvesting and processing, with the aim of enhancing the industry's productivity and profitability. CCFI's activities also include resource conservation research, equipment development and marine biotechnology. The Centre's services are available to anyone in the fishery or aquaculture industry who wishes to overcome obstacles or meet opportunities through science and technology.
CCFI is an organization structured to meet the needs of the industry quickly and efficiently. The Industrial Liaison Officer collaborates directly with clients to develop and execute industrially relevant research and development projects.

## Mandate

The organization works with industry clients to identify needs. It then collaborates with scientific and technical faculty and staff to devise solutions to meet those needs. CCFI works to ensure that the initiatives are organized, on time and directed to address the specific needs of the industry clients. The Centre also funds these projects, when required.
The Centre's research and development undertakings cover all areas of importance to the fishery and aquaculture industry:

1. Environmentally Sustainable Harvesting

## 2. Energy Efficiency

3. Utilization of Fish Wastes
4. Resource Assessment and Surveys
5. Improved and More Efficient Fishing Platforms
6. Human Resource/Technology Applications
7. Alternative Fish and Shellfish Species for Aquaculture
8. Efficiency and Profitability in Aquaculture
9. Resolving Environmental Issues in Aquaculture

With strong representation from industry, the Board of Directors oversees the direction and mandate of the Centre to ensure that its work is always relevant to the needs of the fishery.

### 11.2 C-CORE

www.c-core.ca

## President \& CEO

Griffin, P., President \& CEO, C-CORE
C-CORE is a separately incorporated corporation of Memorial University of Newfoundland that creates value in the private and public sectors by undertaking applied research and development, generating knowledge, developing technology solutions and driving innovation.

Established in 1975 to address challenges facing oil \& gas development offshore Newfoundland \& Labrador and other ice-prone regions, C-CORE is now a multi-disciplinary R\&D organization with world-leading capability in:

1. Remote Sensing
2. Ice Engineering
3. Geotechnical Engineering


With unparalleled harsh environment expertise, C-CORE is active on every continent, providing research-based advisory services and technology solutions to national and international clients in the natural resource, energy, security and transportation sectors.
C-CORE focuses on long-term value by investing in research, equipment and competence development, and continuously growing capability and capacity. Throughout the past generation, C-CORE has supported over 1000 undergraduate, graduate and post-doctoral students on their path to become the highly qualified personnel needed to drive global innovation, and has served as an incubator for 18 new technology companies.
Headquartered in St John's, NL, with offices in Ottawa and Halifax, C-CORE maintains a close collaborative relationship with Memorial University of Newfoundland, sharing and augmenting its extensive facilities, diverse academic expertise and research portfolio.
From a staff of some 75 scientists, engineers and other professionals, project teams are assembled based on client need, drawing on internal expertise across disciplines, as well as national/international academic, institutional and corporate partnerships, in order to support increasingly safe and sustainable operations in challenging environments around the globe.
C-CORE's in-house facilities include mechanical, electrical and soils laboratories; high-security high-capacity computing facilities; and a 5.5 m-radius, 200G payload capacity Actidyn centrifuge (the largest in Canada and the only one in North America designed to model cold region phenomena), with adjoining model preparation laboratory and earthquake simulator; mechanical, electrical and soils laboratories.
C-CORE also hosts LOOKNorth (Leading Operational Observations and Knowledge for the North), a national Centre of Excellence for Commercialization and Research (CECR) dedicated to validating and commercializing monitoring technologies that support safe and sustainable development of Canada's northern resources.

### 11.3 Centre for Collaborative Health Professional Education

www.med.mun.ca/cchpe

## Director

Heath, 0., B.A. McGill, M.Sc., Ph.D. Memorial; Associate Professor; Joint appointment Student Wellness and Counselling Centre and Community Health and Humanities, Faculty of Medicine; Cross appointment Department of Psychology
An up-to-date personnel listing is available at www.med.mun.ca/CCHPE/Home.aspx.
The Centre was established in September 1999 in response to a growing emphasis on interprofessional health care. Centre oversight is provided through a Governing Council comprising: the Deans of the Faculties of Education and Medicine and the Schools of Human Kinetics and Recreation, Nursing, Pharmacy and Social Work; the Director of the Student Wellness and Counselling Centre; or their representatives.
The Centre's mission is to provide leadership in interprofessional education (IPE) and research that will improve the access, quality, safety and efficiency of health and social care provided to the public. Key activities of the Centre include:

1. development of interprofessional education curriculum for both learners and practitioners;
2. development of evaluation tools and frameworks for interprofessional education and collaborative practice;
3. research initiatives and networks related to interprofessional education and collaborative practice;
4. faculty development related to interprofessional education and collaborative practice; and
5. development of leaders in interprofessional education and collaborative practice.

All members of the University community including faculty, staff, and students are invited and encouraged to be engaged in the activities of the Centre. Academic Staff Members may hold an appointment as either a Faculty Scholar or Faculty Associate of the Centre. Faculty Scholars are appointed by the Governing Council on the recommendation of the respective Dean or Director based on their active engagement in academic development and scholarly activity related to the field of interprofessional collaboration and education. Faculty Associates actively participate in curriculum development or instruction of interprofessional education programs coordinated by the Centre. They are reviewed and approved by the Governing Council on an annual basis.
Further information may be obtained by contacting the Centre in writing to the Centre for Collaborative Health Professional Education, Memorial University of Newfoundland, Health Sciences Centre H1650, St. John's, NL Canada, A1B 3V6, or by telephone at (709) 8642895, or by fax at (709) 864-4988, or through the website at www.med.mun.ca/cchpe.

### 11.4 Centre for Earth Resources Research (CERR)

## Director

Hanchar, J.M., B.S. Memphis, M.S. Vanderbilt, Ph.D. Rensselar Polytechnic Institute
An up-to-date personnel listing is available at www.mun.ca/earthsciences/Our_People.

## Research Group

The Centre draws on the research expertise of faculty and research staff members in the Department of Earth Sciences as well as other specialists inside and external to the University. For a complete listing of faculty, see Earth Sciences entry.

## Scope and Objectives

The CERR was established in 1983 to provide for the co-ordination and promotion of earth resources research and associated work related to the origin, discovery, development, exploitation, and environmental aspects of earth resources. The Centre promotes, initiates, and co-ordinates research within the earth resources disciplines on the national and international scenes. Researchers interact, when appropriate, with the industrial and government sectors and introduce other organizations to the potential benefits of further research and development in earth resources. The special facilities of the Centre complement the development of graduate and undergraduate programs in earth sciences and related disciplines at Memorial University of Newfoundland. A further function of the Centre is to contribute to the training of people competent in solving earth resources problems and to encourage personnel exchanges with industry and government. The Alexander Murray Building houses the Centre, and has laboratories for teaching and basic and applied research.

## Organization

The Centre is an integral part of the Department of Earth Sciences. The active research of faculty members contributes to programs in the Centre. Increasing collaboration is under way with government and industry in research projects that emphasize earth resources. The work of the Centre addresses problems and opportunities related to mineral resources, petroleum resources, exploration technology, environmental geoscience, and generic research. The Centre works closely with other local, national, and international research institutes. CERR hosts the geoscience component of the University's Oil and Gas Development Partnership.

### 11.5 Centre for Risk, Integrity and Safety Engineering (C-RISE)

www.mun.ca/engineering/crise

## Director

Khan, F., B.Sc. (Eng.) AMV, M.Eng., I.I.T. Roorkee, Ph.D. Pondicherry, P.Eng.; Professor and Canada Research Chair in Offshore Safety and Risk Engineering; Head, Department of Process Engineering, Faculty of Engineering and Applied Science
An up-to-date personnel listing is available at www.mun.ca/engineering/crise/about us/people.
Located in the Faculty of Engineering and Applied Science, the Centre for Risk, Integrity and Safety Engineering (C-RISE) is a leading interdisciplinary centre of excellence on safety, integrity and sustainability of industrial processes and systems, with particular focus on process operations in harsh environments. The areas of expertise and activities are:

- Safety engineering;
- Risk engineering;
- Occupational and process safety;
- Fault diagnosis and early warning systems;
- Asset Integrity modelling and management; and
- Environmental modelling and management.

C-RISE engages highly qualified experts and brings together faculty and researchers from engineering and applied science, mathematics, sociology, business, medicine and others to pursue innovative and cross-disciplinary safety, risk and reliability based research and development. The Centre fosters collaboration among faculty and researchers in these various units as well as other experts, nationally and internationally.
Further information can be obtained by writing to the Centre for Risk, Integrity and Safety Engineering (C-RISE), Memorial University of Newfoundland, Bruneau Centre for Research and Innovation, IIC 1021, St. John's, NL, A1C 5S7, or by e-mail at crise@mun.ca, or to the Director at fikhan@mun.ca, or through the website at www.mun.ca/engineering/crise.

### 11.6 Centre for Social Enterprise

www.mun.ca/socialenterprise

## Manager

Helwig, N., B.A. McGill, M.B.A. Strathclyde
An up-to-date personnel listing is available at www.mun.ca/socialenterprise/about.
A collaboration between the Faculty of Business Administration, the School of Social Work, and the School of Music, Memorial University of Newfoundland's Centre for Social Enterprise acts as a catalyst to nurture social entrepreneurs, strengthen social enterprises and drive social innovation in Newfoundland and Labrador. The Centre's activities support teaching and learning in social enterprise, such as the University's Master of Business Administration in social enterprise and entrepreneurship; foster research to strengthen understanding of social entrepreneurship and the dynamics of social enterprises; and support growing social enterprises in our Province through social enterprise incubation.
The Centre works within the social entrepreneurial ecosystem to create linkages among students, faculty, community, and company leaders for networking and mentorship opportunities. It's a platform to support creative linkages between academic disciplines to nurture innovation in social entrepreneurship.
Further information can be obtained by writing to the Centre for Social Enterprise, Faculty of Business Administration, BN-4016, Memorial University of Newfoundland, St. John's, NL, A1B 3X5, or by e-mail at socialenterprise@mun.ca, or by telephone to (709) 8646740 , or through the website at www.mun.ca/socialenterprise.

### 11.7 Folklore and Language Archive (MUNFLA)

## www.mun.ca/folklore/research/munfla

## Chair, Advisory Committee

Dean of Humanities and Social Sciences
An up-to-date personnel listing is available at www.mun.ca/folklore/research/munfla/staff.php.
Memorial University of Newfoundland Folklore and Language Archive (MUNFLA) is Canada's foremost repository for recorded and collected items of Newfoundland and Labrador folklore, folklife, language, oral history and popular culture. Established in 1968, it is one of the oldest archives at Memorial University of Newfoundland. The Archive is an integral part of the teaching and research activities of the Department of Folklore at the graduate and undergraduate levels. It is a member of the Association of Newfoundland and Labrador Archives, the Canadian Council of Archives, and the American Folklore Society.
The Archive contains diverse materials, donated by more than 12,000 contributors, covering topics such as custom and belief, childlore, material culture and work techniques, song, music, dance, tale, legend, personal experience narrative, poetry, riddles and conundrums, proverbs and foodways. Special holdings include the field notebooks of Maud Karpeles who compiled Folk Songs from Newfoundland (1971); E. R. Seary's collection of research materials on family names; the folklore collections of Herbert Halpert and John Widdowson; the extensive Newfoundland and Labrador song collections of Kenneth S. Goldstein and MacEdward Leach; Lawrence R. Smith's linguistic materials on Labrador Inuktitut and Southern Avalon dialect; 12,000 Canadian Broadcast Corporation recordings; the Lorne Russwurm international collection of country music; and Franco-NL materials from the Centre d'Études Franco-Terreneuviennes. Overall, the collection contains 40,000 audio tape recordings, 13,500 commercial recordings, 21,500 photographs, 2,000 printed documents, 16,000 manuscripts, 1000 video tape recordings, 96,000 Folklore survey cards, and 4500 questionnaire responses.
Further information can be obtained by writing Memorial University of Newfoundland Folklore and Language Archive, Department of Folklore, ED-4038, G. A. Hickman Building, St. John's, NL Canada A1B 3X8, or by e-mail at munfla@mun.ca, or by telephone at (709) 864-8401, or by fax at (709) 864-4718, or through the website at www.mun.ca/folklore/research/munfla.

### 11.8 Gardiner Centre

www.mun.ca/gardinercentre

## Director

Puddester, L., B.Comm.(Co-op)(Hons.) Memorial, M.B.A. Queen's University
An up-to-date personnel listing is available at www.mun.ca/gardinercentre/contact-us
As the outreach unit of Memorial University of Newfoundland's Faculty of Business Administration, Gardiner Centre is focused on developing management and leadership skills, expanding business knowledge and facilitating organizational growth. Whether clients are existing or aspiring supervisors, managers, executives or entrepreneurs, Gardiner Centre has programs to advance their business and leadership knowledge and skills. Through training, events or solutions, Gardiner Centre connects clients with the expertise and experience of the Faculty's instructors and other business leaders and educators.
Gardiner Centre's facilities, located in the Emera Innovation Exchange, 100 Signal Hill Road, provide an interactive adult learning environment which is designed to afford clients with everything they need to ensure a relaxing, retreat-like atmosphere, conducive to learning.
Further information may be obtained by contacting Gardiner Centre by telephone at (709) 864-7977 or through the website at www.mun.ca/gardinercentre.

### 11.9 Genesis Group Inc.

www.genesiscentre.ca
President and CEO
Simms, M., B.B.A. Memorial
An up-to-date personnel listing is available at www.genesiscentre.ca/team.
Genesis Group /hc. is a separately incorporated entity of Memorial University of Newfoundland and is governed by a board of directors representing industry, academia, and government. The Genesis Group is located in the new Emera Innovation Exchange at Memorial University of Newfoundland's Signal Hill Campus. The Genesis Centre exists to help build amazing technology companies in Newfoundland and Labrador. The Centre mobilizes the Province's business community and a network of world class mentors to help the entrepreneurs develop comprehensive business plans, raise equity capital and secure global market access.
Further information may be obtained by contacting the Genesis Group Inc. by telephone at (709) $864-2625$ or through the website at www.genesiscentre.ca.

### 11.10 Health Research Unit (HRU)

www.med mun.ca/hru
Director
Pullman, D., B.Ed. Western Ontario, M.A., Ph.D. Waterloo, Medical Ethics
An up-to-date personnel listing is available at www.med.mun.ca/HRU/FacultyStaff.aspx.
The Health Research Unit (HRU) is a component of the Division of Community Health and Humanities, Faculty of Medicine, Memorial University of Newfoundland. The purpose of the HRU is to improve the health of the community through studies in:

- Health promotion
- Health protection
- Health status
- Health services
- Health programs and policies
- Disease prevention
- Ethics and Humanities
- Aboriginal Health

The goals of the HRU are to make available the professional skills and experience in the Division of Community Health and Humanities to communities, organizations and agencies, government, industry and other faculties.
The Health Research Unit may be contacted by telephone at (709) 864-6656 or by e-mail to hru@mun.ca.

### 11.11 Institute of Social and Economic Research (ISER)

www.mun.ca/iser

## Director

Tye, Dr. D., B.A.(Hons.) Mount Allison, M.A., Ph.D. Memorial; Professor, Department of Folklore
An up-to-date listing for the Executive Committee is available at www.mun.ca/iser/contact/board.php.

## Purpose And Mandate

The purpose of the Institute shall be to undertake, sponsor, and publish research within such disciplines and in such parts of the world as are deemed of relevance to Newfoundland and Labrador and the broader Atlantic world. Without limiting the generality of the above, research pertaining directly to social and economic development in Newfoundland and Labrador shall be of special importance.

## Organization

The Institute is an integral part of, and not an autonomous appendage, of the University. It is so organized that all its officers serve the University in other capacities and it is ultimately responsible to the President and Board of Regents of the University. The management of its affairs is vested in an Executive Committee, while the day-to-day responsibilities are in the hands of the Director. Since September 2006, the Executive Committee has also served as the Board of Directors of the J.R. Smallwood Foundation for Newfoundland and Labrador Studies.

## Fellowships

In general, ISER fellowships function to supplement and stimulate research interests of faculty and graduate students working within the research mandate of ISER. Terms and conditions of ISER fellowships may be obtained in writing to ISER, Institute of Social and Economic Research, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, A1C 5S7, or by telephone at (709) 864-8156, or by email at iser@mun.ca, or through the website at www.mun.ca/iser/.

## ISER Books

The Institute publishes research falling within the ISER mandate - more than 160 titles to date. Many of the books originate in research undertaken by ISER itself. Some notable ISER books, however, have originated outside the Institute. Authors are invited to submit completed manuscripts that fall within ISER's mandate. Further information may be obtained in writing to ISER Books, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, A1C 5S7, or by telephone at (709) 864-3453, or email at iserbooks@mun.ca, or through the website at www.mun.ca/iser/.

### 11.12 Internationalization Office

www.mun.ca/international

## Director

Knutson, S., B.Ed. Concordia, M.Ed. Memorial
An up-to-date personnel listing is available at www.mun.ca/international/contacts-new

## Purpose And Mandate

The Internationalization Office is, in general, concerned with:

1. implementing the Strategic Internationalization Plan 2020;
2. supporting the international experiences of students at home and abroad;
3. providing program information and advice to faculty and staff and act as the central contact with Universities Canada, the Canadian Bureau for International Education, and other similar bodies; and
4. pursuing new opportunities for international business development with the private sector and other educational institutions.

Further information may be obtained by contacting the Internationalization Office by telephone at (709) 864-2330 or through the website at www.mun.ca/international/ or by mail to Internationalization Office, 323 Prince Philip Drive, G.A. Hickman Building, Room ED4007, Memorial University of Newfoundland, St. John's, NL, Canada A1B 3X8.

### 11.13 The J.R. Smallwood Foundation for Newfoundland and Labrador Studies

www.mun.ca/smallwood

## Director

Tye, Dr. D., B.A.(Hons.) Mount Allison, M.A., Ph.D. Memorial; Professor, Department of Folklore
An up-to-date listing for the Executive Committee is available at www.mun.ca/smallwood/contacts/board.php.
Purpose And Mandate
The Smallwood Foundation was established with funds transferred in trust from the J.R. Smallwood Heritage Foundation. The Foundation administers the income from such funds for the promotion and support of research focussing on Newfoundland and Labrador. The board supports research proposals in the humanities and social sciences from both inside and outside the university community.

## Organization

Effective September 1, 2006, the Executive Committee of ISER also serves as the Board of Directors of the J.R. Smallwood Foundation. In accordance with its mandate, the board awards grants to individual scholars and organizations which have clearly defined objectives and which serve to develop the academic understanding and general appreciation of the province's society, history and culture. Full details of grant categories and application procedures are available on the Foundation's web site at www.mun.ca/smallwood/.
Further information may be obtained by telephone at (709) 864-8156 or in writing to The Director, J.R. Smallwood Foundation for Newfoundland and Labrador Studies, Memorial University of Newfoundland, St. John's, NL, A1C 5S7.

### 11.14 Labrador Institute

## www.mun.ca/labradorinstitute

## Director

Cunsolo, A., Ph.D. Guelph
An up-to-date personnel listing is available at www.mun.ca/labradorinstitute/people.

## Purpose And Mandate

The Labrador Institute is a leading centre of research, education, outreach, and policy, by and for the North. As a division of Memorial University of Newfoundland, the Labrador Institute is one of the few university based units in Canada dedicated solely to the needs and priorities of the North. Since 1979, the Labrador Institute has worked to bring the resources and expertise of Memorial University of Newfoundland to Labrador, and the priorities and local knowledge and sciences of Labrador to the University.
The Labrador Institute currently has four remote locations servicing the region: a central core in Happy Valley-Goose Bay (HVGB) (central Labrador) including offices, research space, and a library and Labrador-based archives; a new state-of-the-art research station and laboratories, including analytic and prep labs, in North West River ( 30 minutes from HVGB); an office in Labrador City (western Labrador); and a research hub in Forteau (southern Labrador).
With a focus on Northern-led, Northern-focused, and Northern-inspired research and education, the Labrador Institute has a diverse complement of staff members, including faculty members, scientists, researchers, post-doctoral fellows, program coordinators, and administrative specialists, as well as a range of students, visiting researchers, research assistants, and interns. Since the Labrador Institute is situated on the homelands of the Innu and Inuit, the Institute also has a special obligation to the Indigenous peoples of the region, and works in partnership on research and education programming, outreach activities, and strategic planning.

## Organization

The Director of the Labrador Institute reports to the Provost/Vice-President (Academic)/Pro Vice-Chancellor.
Further information may be obtained by contacting the Institute by e-mail to labradorins@mun.ca, in writing to the Labrador Institute, P.O. Box 490, Station B, Happy Valley-Goose Bay, NL, A0P 1E0, or by telephone at (709) 896-6210, or by fax at (709) 896-2970.

### 11.15 Maritime History Archive (MHA)

www.mun.ca/mha
Contact information is available at www.mun.ca/mha/about.php.
The Maritime History Archive (MHA) is a unit of the Faculty of Humanities and Social Sciences. Its functions include the acquisition, organization and preservation of materials relating to the history of maritime activifies in Newfoundland and Labrador and throughout the North Atlantic World.
In the mid 1970s the Public Record Office, London, England transferred $22,000 \mathrm{ft}$. of original documentation in the series "Agreements and Account of Crew" for 1863-1938, 1951-1976 to the MHA. These documents represent an incomparable source for the study of the operation and movements of British Empire vessels throughout the world. Combined with other collections in the archive which relate to fisheries, commerce and other sea-based activities, the crew agreements have made the MHA an internationally known resource centre for the study of maritime history. In addition, in 2001 the Newfoundland and Labrador Heritage Web Site came under the direction of the MHA.
The MHA is housed in the Henrietta Harvey Building and is open to the public Monday through Friday from 9 a.m. to 1 p.m. and 2 p.m. to 4 p.m. Additional information regarding the MHA is available at www.mun.ca/mha.

### 11.16 The Maritime Studies Research Unit (MSRU)

www.mun.ca/msru

## Chair

Korneski, K., B.A. Northern Illinois, Ph.D. Memorial; Associate Professor, Department of History
An up-to-date listing for the Unit Members is available at www.mun.ca/msru/members.
The Maritime Studies Research Unit (MSRU) is a research unit within the Faculty of Humanities and Social Sciences, whose purpose is to foster interdisciplinary research on maritime studies, understood as the interpretation of human behaviour in marine and coastal environments, in the past and to the present day. The Unit furthers this objective with workshops, colloquia, publications, and research projects and by providing advice and support to other units within the University. Membership in the MSRU is open to faculty and staff of Memorial University of Newfoundland with research interests in maritime studies. Other scholars with parallel interests, including graduate students in the University's Faculty of Humanities and Social Sciences, are eligible for associate membership. Currently, the MSRU has associate members in Canada, England, Nigeria, Scotland and the United States.

### 11.17 Memorial Centre for Entrepreneurship (MCE)

www.mun.ca/mce
Director
Villaume, F., M.Eng. Ëcole Nationales Supérieure des Arts et Métiers, France, M.Sc. Laval
Up-to-date personnel and the Board of Advisor listings are available at www.mun.ca/mce/people/index.php.
The Memorial Centre for Entrepreneurship (MCE) is a campus-wide Centre of Memorial University of Newfoundland in St. John's promoting entrepreneurship, supporting students, faculty and staff in the development of their startup idea and contributing to the development of an attractive entrepreneurial ecosystem.
MCE is the starting point for any Memorial University of Newfoundland student, faculty or staff member interested in entrepreneurship. The Centre offers mentorship, networking, training, and funding.
Further information can be obtained on the website at www.mun.ca/mce or by e-mail to mce@mun.ca.

### 11.18 MUN (UK) Ltd.

## www.mun.ca/harlow

## Chair, Board of Directors

Dr. G. Kachanoski, President and Vice-Chancellor
Contact information for MUN (UK) Ltd. is available at www.mun.ca/harlow/contact/.
Harlow Campus is the international campus of Memorial University of Newfoundland, one of only two universities in Canada with campus facilities in the United Kingdom. MUN (UK) Ltd. directs the operations of Harlow Campus in Essex, United Kingdom. Harlow Campus is run by a general manager who operates the Campus for students in academic (credit) and professional development (noncredit) programs. All programs are developed and overseen through Memorial University of Newfoundland's Office of the Provost and Vice-President (Academic).
Specific enquires about academic programs offered at the Harlow Campus should be directed to the head of the appropriate academic unit or the Office of the Provost and Vice-President (Academic), Memorial University of Newfoundland, St. John's, NL, A1C 5S7, by telephone at (709) 864-8246, by fax at (709) 864-2074, or by email at vpa@mun.ca.
General enquiries about the Harlow Campus should be directed to Ms. Sandra Wright, General Manager, Harlow Campus, The Maltings, St. John's Walk, Harlow, Essex CM17 OAJ, UK., by telephone at 011441279455902 , by fax at 011441279455921 , or by e-mail at sandra.wright@mun.ca.
For details on Harlow Campus, visit www.mun.ca/harlow.

### 11.19 Newfoundland and Labrador Centre for Applied Health Research (NLCAHR)

www.nlcahr.mun.ca

## Director

Bornstein, S., B.A. Toronto, M.A., Ph.D. Harvard
Up-to-date personnel and Board of Directors listings are available at www.nlcahr.mun.ca/About.
The Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) was established in September 1999 as a joint venture of the Department of Health and Community Services, the Health Care Corporation of St. John's and Memorial University of Newfoundland. Since its inception, the Centre has provided support for applied health research in the Province through its grant and awards programs, its knowledge transfer activities and its capacity development services.
NLCAHR's mission is to contribute to the effectiveness and efficiency of the health and community service system of Newfoundland and Labrador and to the physical, social, psychological health and well-being of the Province's population by supporting the development and the use of applied health research in this province.
The Centre's work revolves around three principal goals:

1. to help build human capacity and organizational resources for undertaking and supporting high-quality applied health research in the Province;
2. to increase the amount and impact of high-quality applied health research undertaken on the priority research themes of Newfoundland and Labrador; and
3. to help increase the effective use of research evidence in the Province's health and community services system.

NLCAHR fosters and supports inter-disciplinary collaboration and serves as a bridge between researchers and decision-makers in government, the provincial healthcare system and community organizations. The Centre funds health research through annual peerreviewed research grant competitions; supports research training by awarding fellowships at the master's, doctoral, and postdoctoral levels; and runs a number of other programs to encourage and support applied health researchers in Newfoundland and Labrador. The Centre's flagship knowledge exchange program, the Contextualized Health Research Synthesis Program (CHRSP), is a collaborative effort of researchers and health system leaders that seeks to identify urgent issues involving health services and health technologies that are of pressing interest to Newfoundland and Labrador. CHRSP teams work to identify the highest quality research on these issues and to interpret it in light of the unique geographic, economic, demographic and other characteristics of this province.
The research supported by the Centre is broad in scope and includes research in the areas of health services delivery and evaluation, health economics and policy, healthcare utilization and systems, community and population health, health-related social sciences, and applied clinical research focussing on the process of delivering care rather than therapeutics or diagnostics.
Further information may be obtained by contacting the Centre in writing to the Newfoundland and Labrador Centre for Applied Health Research, Suite 300, 95 Bonaventure Avenue, St. John's, NL, A1B 2X5, or telephone at (709) 777-6993, or fax at (709) 777-6734, or email at nlcahr@mun.ca, or through the website at www.nlcahr.mun.ca.

### 11.20 Ocean Engineering Research Centre (OERC)

www.mun.ca/engineering/research/facilities/centres/oerc/

## Director

Molyneux, W.D., B.Sc., M.A.Sc. British Columbia, Ph.D. Memorial, P.Eng., Fellow RINA; Associate Professor, Ocean and Naval Architectural Engineering

An up-to-date Governance Board listing is available at www.mun.ca/engineering/research/facilities/centres/oerc/governance.php.

## Scope And Objectives

The Ocean Engineering Research Centre (OERC) is an integral part of the Faculty of Engineering and Applied Science at Memorial University of Newfoundland and has contributed to the success of the Faculty's research and academic programs.
The overall goal of the OERC is to generate research activity that has high potential for impact. The OERC draws upon faculty expertise and its relationships with industry, other research institutes, and branches of government to create networks of people who share common goals. The scope of applied research and consulting activities carried out by members of the OERC is broad, including ocean engineering related to the offshore, marine transportation, and fishing industries. In addition to faculty experience, the OERC operates a 58 metre long towing tank with wave generation capabilities.

## Organization

The St. John's marine research community is vibrant and collaborative. Within the University the Centre maintains ties with C-CORE (by joint appointments of faculty and collaborative projects), with the Ocean Science Centre and the Fisheries and Marine Institute. Similar ties are maintained with the Institute for Ocean Technology (IOT) of the National Research Council (NRC), which is located adjacent to
the Faculty of Engineering and Applied Science on the University campus. The Centre collaborates with and serves various small and large private sector firms with ocean engineering interests. The Centre works with Oceanic Consulting Corporation to provide marine performance evaluation services to the world's oceans industries. An alliance between the University, NRC and Marineering Limited of St. John's, Oceanic uses the ocean engineering capabilities and facilities of the University and NRC to support clients and projects around the world.

### 11.21 Ocean Sciences Centre (OSC)

www.mun.ca/osc
www.mun.ca/osc/jbarb/
www.mun.ca/osc/CDRF/index.php

## Director

Fletcher, G.L., B.Sc. British Columbia, Ph.D. California; Professor Emeritus; Head, Department of Ocean Sciences
An up-to-date personnel listing is available at www.mun.ca/osc/people.
The Ocean Sciences Centre (OSC) is a major facility for marine research on the Atlantic coast, and is one of Canada's largest marine laboratories. It houses the Department of Ocean Sciences, the Joe Brown Aquatic Research Building and the recently constructed ColdOcean and Deep-Sea Research Facility (CDRF). The OSC provides Canadian and international scientists and students access to the flora and fauna of the northwest Atlantic Ocean and is uniquely suited for shore-based studies of cold-ocean processes and subarctic, Arctic and deep-sea organisms. The facility provides all the necessary elements to conduct first-rate marine science, including high quality seawater, equipment to collect and maintain aquatic organisms, boats and vehicles to access field sites, laboratory space with running seawater, cutting-edge analytical and molecular biological instruments, and support staff. A strategic goal of the OSC is to carry out world-class research that focuses on organisms and processes in cold oceans, and to provide high quality educational and training opportunities.
Located at Logy Bay, 10 km from the St. John's campus, the OSC has an excellent unpolluted seawater supply that is the lifeline of the centre. There are 57 laboratories of varying size, some of which have flowing seawater and others which are dedicated for analytical chemistry, biochemistry, physiology, histology, molecular biology (genetics and genomics) and microscopy. There are several cold rooms for controlled physiological experiments and common-use rooms for fish sampling, microscopy/image analysis, high-speed centrifugation, and radioisotope analyses. Field Services maintain a suite of oceanographic sampling tools. The unit operates a 4 m zodiac, 7 m Boston Whaler and 5 ton multi-purpose vehicle with aeration and recirculating seawater holding tanks ( 2500 L ) suitable for transporting live specimens over long distances.
The Dr. Joe Brown Aquatic Research Building (JBARB) provides state-of-the-art facilities and world class staff with expertise to support research, training, pre-commercial production, and small-scale commercial trials in marine aquaculture. A critical component of the 1400 square meters facility is a seawater system designed to deliver high quality, temperature-controlled, flow-through water. Separate tanks and rooms are available for broodstock conditioning, paired mating, hatchery rearing, first feeding/nursery operations, grow-out and physiological investigations on various marine species including fishes, molluscs, and echinoderms. The JBARB carries out research in collaboration with Memorial University of Newfoundland, and government and industry partners. The aquaculture potential of various marine species (Atlantic cod, Atlantic salmon, Arctic char, Steelhead trout, cunners, flounder, oysters, mussels, sea cucumbers, sea urchins, etc.) is being evaluated through the study of broodstock biology, physiology and genomics, and the development of larval rearing techniques.
The Cold-Ocean Deep-Sea Research Facility (CDRF), provides researchers with access to state of the art infrastructure and equipment for the study of freshwater and marine organisms, especially those from the cold waters of the Arctic and North Atlantic oceans. The CDRF uniquely provides a local seawater line for a continuous flow-through water supply to an AQC3 certified biocontainment facility. The facility is newly equipped with histology, microscopy and cell culture equipment. Together, these tools are used to study the biology and mitigation of disease in commercial fisheries species. Pressure vessels, the only ones of their kind in North America, are used for original research on deep-sea life and equipment.

## Research Themes

- physiology, biochemistry and molecular biology
- marine biotechnology
- biological and chemical oceanography
- behavioural and population ecology
- aquaculture and fisheries
- marine biogeochemistry


### 11.22 Research Grant and Contract Services (RGCS)

www.mun.ca/research

## Director

Miller, D., B.Sc.(Hons.), M.Sc., MCIC Memorial
An up-to-date personnel listing is available at www.mun.ca/research/about/rgcs/contact.php.
Research Grant and Contract Services (RGCS) mandate is to support researchers through the entire research project life cycle which includes the review and approval of research grants and contracts, project management support \& post award administrative services.
RGCS has designed, implemented and now supports a wide range of technologies which focus on streamlining the business processes related to research. These processes include: applications for funding, negotiation of contracts for research projects, applications for and maintenance of ethics on appropriate research projects, project oversight for the delivery of major research partnership projects.
RGCS is the primary point of contact for all research funding applications except the Canada Research Chairs (CRC) and Canada Foundation for Innovation (CFI) programs. Strategic Institutional Research Initiatives (SIRI) is responsible for the above mentioned programs.
Individuals seeking more information about Research Grant and Contract Services, should contact the Director by emailing rgcs@mun.ca, by telephone at (709) 864-4791, by fax (709) 864-4612 or in-person at the Bruneau Centre for Research and Innovation, room IIC2015, or through the website at www.mun.ca/research.

### 11.23 The Works/Memorial University Recreation Complex Incorporated (MURC)

www.theworksnl.ca
Director/General Manager
Neil, C.
An up-to-date personnel listing is available at www.theworksnl.ca.
The Works
The Works is a separately incorporated entity with a volunteer Board of Directors. The Works operates the Field House, Aquarena and other recreation facilities on the St. John's campus. The facilities offer a variety of fitness, aquatics and recreation programs for all ages. The Works offers services for members of the University, including students, faculty, and staff and also the community at large.
Further information may be obtained by contacting The Works by telephone at the Field House (709) 864-4422, or the Aquarena at (709) 864-3798, or through the website at www.theworksnl.ca.


## UNIVERSITY REGULATIONS



## UNIVERSITY REGULATIONS

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## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Fees and Charges

www.mun.ca/finance/fees/
Fees and charges are listed on the Financial and Administrative Services website and are accurate at the date of publishing. The University reserves the right to make changes to the regulations and fees and charges. Any questions concerning fees and charges for the Cashier's Office in St. John's should be directed in writing to the Cashier's Office, Memorial University of Newfoundland, Arts and Administration Building, A1023, St. John's, NL, A1C 5S7, or by e-mail at cashiers@mun.ca, or by telephone at (709) 864-8228, or through the website at www.mun.ca/finance. Any questions concerning fees and charges for the Bursar's Office in Corner Brook should be directed in writing to the Bursar's Office, Grenfell Campus, University Drive, Corner Brook, NL, A2H 6P9, or by telephone at (709) 637-6286, or through the website at www.grenfell.mun.ca/bursar.
The complete and up-to-date listing of fees and charges is available on the Financial and Administrative Services website at www.mun.ca/finance/fees/.

## 4 Admission/Readmission to the University (Undergraduate)

### 4.1 Admission/Readmission Information

This section applies to all undergraduate applicants except those applying to the Faculty of Medicine.
Applicants seeking admission to the Faculty of Medicine should refer to the Faculty of Medicine regulations for information.
The application for admission or readmission to the University is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.
Applicants seeking admission to a particular faculty or school may be required to submit additional documents beyond those required for general admission to the University. Applicants should refer to appropriate faculty or school regulations for procedures, deadlines, admission requirements and further information.

1. Applications for admission/readmission should be submitted by the deadline dates listed in the University Diary. Applications received later than the stated deadline dates will be processed as time and resources permit.
2. Each application must be accompanied by the appropriate application processing fee. An additional application processing fee is required from non-Canadian applicants or applicants transferring from post-secondary institutions outside of Newfoundland and Labrador. Neither fee is refundable nor will it be credited to the applicant's financial account under any circumstances. Information regarding fees and charges can be found on the Financial and Administrative Services website at www.mun.ca/finance/fees/.
3. Applicants who have previously attended Memorial University of Newfoundland and have not registered for courses for the past three consecutive semesters (Fall, Winter, Spring) are required to submit a new Application for Admission/Readmission with the appropriate application processing fee.
4. The admission criteria for each category of applicant is specified under Categories of Applicants, Admission Criteria And Required Documentation.
5. Admission to some courses, programs and/or the University may be limited by the University when it deems the facilities and resources available to it are not adequate to provide for additional students. Consequently possession of the minimum requirements does not guarantee that an applicant will be granted admission to a course, a program and/or the University.
6. Applicants who meet the University's general admission requirements may not necessarily meet the pre-requisites for registration in all first-year courses. Course registration may require the achievement of a minimum grade or score in a specific high school subject or in a specific placement or other standardized examination. For information on first-year English course placement for students who have been required to prove English proficiency for general admission purposes, see the regulations outlined under English Language Proficiency Requirements below. For information on course placement and pre-requisites for first-year mathematics and other subjects, consult the respective faculty and school sections of this Calendar.
7. The University may set its own matriculation examinations either in separate subjects or in all those required for matriculation, and may refuse admission to any applicant failing to attain a satisfactory standard in these examinations.
8. The University reserves the right to refuse admission to any applicant.
9. Applicants may be required to provide medical evidence of their fitness to pursue university studies.

### 4.2 English Language Proficiency Requirements

As English is the primary language of instruction at this University, all applicants seeking admission to Memorial University of Newfoundland must possess an adequate knowledge of written and spoken English as a prerequisite to admission. Regardless of country of origin or of citizenship status, applicants will be required to provide proof of proficiency in the English language based on one of the following forms.

### 4.2.1 English Language Secondary Institution

Applicants are required to have successfully completed the equivalent of three years of full-time instruction in an English language secondary institution as recognized by Memorial University of Newfoundland including successful completion of appropriate course(s) in English at the Grade 12 or equivalent level. English as a Second Language (ESL) courses are not acceptable for meeting this requirement. The University may require, as deemed appropriate by the University Committee on Admissions, further proof of English proficiency through one of the standardized tests below.

### 4.2.2 English Language Post-Secondary Institution

Applicants who have attended a recognized post-secondary institution where English is the language of instruction must have successfully completed the equivalent of 30 credit hours. These 30 credit hours must include 6 transferable credit hours in English courses. For information on transfer credit refer to Transfer Credit.

### 4.2.3 Memorial University of Newfoundland's Intensive English Program

Applicants are required to successfully complete Memorial University of Newfoundland's Intensive English Program (IEP) assessment with an acceptable score, as noted below under Standardized Tests, on the CAEL administered by the University. Information regarding Memorial University of Newfoundland's IEP can be found in the Faculty of Humanities and Social Sciences or the Grenfell Campus sections of the Calendar.

### 4.2.4 Standardized Tests

Applicants proving English Proficiency through one of the following forms may be required to write a placement test prior to the commencement of classes to determine the appropriate course in English for which they should register. For further information refer to English Language Placement Test, Faculty of Science Mathematics Course Descriptions, and Grenfell Campus Mathematics Course Descriptions. The official results of the following standardized tests must be forwarded to Memorial University of Newfoundland directly from an authorized test reporting centre.

### 4.2.4.1 Test of English as a Foreign Language (TOEFL)

A minimum score of 79 with at least 20 in each of Reading and Writing, and no less than 17 in Listening and Speaking is required on the internet-based TOEFL. Information regarding the TOEFL program is available from the Educational Testing Service (ETS), TOEFL/TSE Services, online at www.ets.org/toefl/, from U.S. embassies or consulates, or from offices of the U.S. Information Services.

### 4.2.4.2 International English Language Testing System (IELTS)

A minimum overall band score of 6.5 , with at least band 6 in each of Writing and Reading. Information regarding the IELTS may be obtained from the IELTS Subject Officer, University of Cambridge Local, Examinations Syndicate via www.ielts.org/.

### 4.2.4.3 Canadian Academic English Language (CAEL) Assessment

Minimum band scores between 50 and 60 in each of the four skills tested (Reading, Wifiting, Listening, Speaking), with at least two band scores of 60 are required on the CAEL Assessment. Information regarding the CAEL Assessment may be obtained from the CAEL Assessment Office at www.cael.ca.

### 4.2.4.4 Cambridge English for Speakers of Other Languages (ESOL)

A minimum grade of " B " or, for those who have completed this test since January 2015, an Overall Cambridge English Scale score of 176 in the Certificate of Advanced English (CAE) or a minimum grade of "C" in the Certificate of Proficiency in English (CPE) are required. Information regarding these examinations may be obtained from University of Cambridge ESOL Examinations via www.cambridgeenglish.org/.

### 4.2.4.5 Canadian Test of English for Scholars and Trainees (CanTEST)

Minimum band scores of 4.5 in the listening comprehension and reading comprehension sub-tests and a score of 4 in writing are required on the CanTEST. Information regarding this examination may be obtained from the Language Testing Service of the University of Ottawa online at www.cantest.uottawa.ca/index.php.

### 4.2.4.6 Michigan English Language Assessment Battery (MELAB)

A minimum score of 85 is required on the MELAB. Information on the MELAB testing program may be obtained from the University of Michigan and Cambridge Collaboration Organization (CaMLA) online at www.cambridgemichigan.org/melab.

### 4.2.4.7 Pearson Test of English Academic (PTE Academic)

A minimum score of 58 in each of the reading, writing, listening, and speaking components of the PTE Academic is required. Information about the PTE Academic is available online at www.pearsonpte.com.

### 4.2.5 English Language Placement Test

1. With the exception of applicants who demonstrate English language proficiency under English Language Proficiency Requirements, English Language Secondary Institution and English Language Proficiency Requirements, English Language Post-Secondary Institution, all applicants will be required to write a placement test in English language. This test must be taken prior to the commencement of classes to determine the appropriate English course for which an applicant should register.
2. Students who are registered for courses at the St. John's Campus or by Distance/Online Learning whose first language is not English and whose performance in the placement test in English language indicates that appropriate placement is in a first-year English credit course will normally be placed in English 1020.
3. Students who are registered for courses at the St. John's Campus or by Distance/Online Learning and whose performance in the placement test in English language indicates that appropriate placement is in English 102F will be required to register in, and successfully complete, English 102F before registering in higher level courses in English.
4. Students who are registered for courses at the Grenfell Campus should consult with the Office of the Registrar at Grenfell Campus.

### 4.2.6 Other

Other forms of proof of English language proficiency, acceptable to the University Committee on Admissions, may be considered.

### 4.3 Categories of Applicants, Admission Criteria and Other Information

The categories of applicants applying for admission/readmission as well as the admission criteria and other related information are listed below. Before a final admissions decision can be reached all required documents must be received. All documents must be official and be forwarded directly to the Admissions Office, Office of the Registrar from the appropriate institution(s) or source(s). Photocopied documents are not acceptable unless duly certified.

### 4.3.1 Applicants Who Have Followed the High School Curriculum of Newfoundland and Labrador

### 4.3.1.1 Admission Criteria

The courses below are courses designed for students who intend to seek post-secondary education at the University or other institutions whose programs demand levels of proficiency equivalent to those required by the University. Applicants shall have completed Graduation Requirements for high school as set down by the Department of Education and obtained credits in the following subjects with an overall average of not less than $70 \%$ compiled from the grades received in those courses at the 3000 level.

- English: English 3201 (2 credits); or the former combination of Language 3101 (1 credit) and one of Thematic Literature 3201 (2 credits) or Literary Heritage 3202 (2 credits).
- Academic or Advanced Mathematics: One of Mathematics 2200, 2201, 2204, or 2205 and one of Mathematics 3200, 3201, 3204, or 3205 (valued at 2 credits each).
- Laboratory Science: Four credits in Laboratory Science (i.e. Biology, Chemistry, Earth Systems, Physics), including at least two credits at the 3000 level chosen from one of Biology 3201, Chemistry 3202, Earth Systems 3209, or Physics 3204 (valued at two credits each). The remaining two credits may be selected from 2000-level courses in the above-noted subject areas or from Science 1206.
- Social Science/Modern or Classical Language: Two credits at the 3000 level in a Social Science area or in a Modern or Classical Language.
- Electives: Two credits at the 3000 level in elective courses chosen from the subjects above or from additional courses approved by the Department of Education for offering at the 3000 level for certificate purposes.


### 4.3.1.2 Other Information

- Early Acceptance: Applicants in their final year of high school who have completed or who are completing a slate of courses which meets the course requirements specified in Applicants Who Have Followed the High School Curriculum of Newfoundland and Labrador, may be granted early acceptance prior to the writing of final examinations. This early acceptance will be subject to verification, when final examination results are released by the appropriate authorities, that the applicant has successfully met the requirements for admission as specified above in Admission Criteria. Applicants who fail to meet the minimum admission requirements at that time will have their acceptance revoked. This does not preclude the application of selective admission criteria for particular faculty/school programs.
- Advanced Placement: Applicants completing Advanced Placement courses through the Advanced Placement Program offered by the College board should also refer to Transfer Credit Advanced Placement (AP).
- English Language Proficiency Requirements will apply to all applicants.


### 4.3.2 Applicants Who Have Followed the High School Curricula of Other Provinces of Canada

### 4.3.2.1 Admission Criteria

- Applicants from other provinces of Canada are required to have successfully completed Grade XII in the University Preparatory Program (in the case of Quebec students, Secondary V Certificate) with a passing mark in each of the following Grade XII academic or advanced-level subjects and an overall average of not less than $70 \%$ compiled from the grades received in the courses selected:
- English
- Mathematics
- Laboratory Science (1 of Biology, Chemistry, Earth Science, Geology or Physics)
- Social Science/Modern Classical Language
- Elective
- Further information on admission requirements by province may be found at www.mun.ca/undergrad/apply or by contacting the Admissions Office, Office of the Registrar by e-mail at admissions@mun.ca.


### 4.3.2.2 Other Information

- Early Acceptance: Applicants in their final year of high school who have completed or who are completing, a slate of courses which meets the course requirements in Applicants Who Have Followed the High School Curricula of Other Provinces of Canada may be granted early acceptance prior to the writing of final examinations. This early acceptance will be subject to verification, when final examination results are received by the Office of the Registrar from the appropriate authorities, that the applicant has successfully met the minimum requirements for admission as specified above in Admission Criteria. Applicants who fail to meet the minimum admission requirements at that time will have their acceptance revoked. This does not preclude the application of selective admission criteria for particular faculty/school programs.
- Advanced Placement: Applicants completing Advanced Placement courses through the Advanced Placement Program offered by the College Board should refer to Transfer Credit Advanced Placement (AP).
- Applicants seeking credit for enriched High School Grade XII courses or Ontario Grade XIII/OAC courses should refer to Transfer Credit Enriched Courses and Ontario Grade XIII/OAC.
- English Language Proficiency Requirements will apply to all applicants.


### 4.3.3 Applicants Who Have Followed the College of the North Atlantic Comprehensive Arts and Science Transition Program

### 4.3.3.1 Admission Criteria

Students who do not meet the requirements for admission to Memorial University of Newfoundland under one of the two categories above but who do hold a high school diploma may be eligible for admission under this category. Students applying under this category must successfully complete all qualification requirements for the award of the Comprehensive Arts and Science (CAS) Transition Year Certificate from the College of the North Atlantic. A full outline of this program is available in the College of the North Atlantic Calendar which is available online at www.cna.nl.ca.
This does not preclude the application of selective admission criteria for particular faculty/school programs. Students may wish to consider the course requirements for their intended program of study at Memorial University of Newfoundland when selecting CAS Transition Year courses for completion of the Transition Year Certificate program.

### 4.3.3.2 Early Acceptance

Applicants who have completed, or who are completing, a slate of courses which meets the Admission Criteria as described above for applicants completing the College of the North Atlantic CAS Transition Year program may be granted early acceptance prior to the writing of final examinations. This early acceptance will be subject to verification, when final examination results are received by the Office of the Registrar from the College of the North Atlantic, that the applicant has successfully met the minimum requirements for admission as specified above in Admission Criteria. Applicants who fail to meet the minimum admission requirements at that time will have their acceptance revoked.

### 4.3.3.3 Other Information

- English Language Proficiency Requirements will apply to all applicants.


### 4.3.4 Applicants for Concurrent Studies

### 4.3.4.1 Admission Criteria

- Applicants in or about to enter their final year of high school with a superior academic record (i.e. normally an overall average of $85 \%$ or above in completed English, Math and Science courses at the 2000 or 3000 level) may apply to enrol in university courses. The applicant for concurrent studies must be enrolled in a high school and completing a slate of courses that meets the course requirements for admission to the University as specified in Applicants Who Have Followed the High School Curriculum of Newfoundland and Labrador.
- Applicants will be required to submit a letter requesting enrolment in a specific course and provide a list of final year registrations; an official high school transcript; and a letter from the high school principal or guidance counsellor clearly supporting admission for concurrent studies.
- Applicants must submit a completed application for admission/readmission with the appropriate fee. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- Normally, enrolment for concurrent studies students will be limited to 3 credit hours in a given semester. Fees and deadlines are the same as for regularly admitted students. University credit will be awarded after successful completion of the course(s) and successful completion of the requirements for admission to the University.
- Normally, eligibility to enrol is limited to the Fall and Winter semesters.
- Concurrent studies students must apply for general admission to the University for the Fall semester of the following academic year. The requirements for admission to the University will apply. Additional faculty application and admission requirements may apply.


### 4.3.4.2 Other Information

- English Language Proficiency Requirements will apply to all applicants.


### 4.3.5 Applicants Who Have Followed the Adult Basic Education Program (ABE)

### 4.3.5.1 Admission Criteria

Applicants shall have completed the Level 玔Adult Basic Education Certificate (ABE) with the approved combination of thirty-six credits set down by the Department of Education and successfully completed, with an overall average of not less than $70 \%$, the following courses as outlined below:

- Communication Skills: IC 3112 and IC 3321 OR English 3101A, 3101B, and 3101C
- Mathematics: One of the following groups:
- Mathematics: IM $3115,3211,3212,3213$, and 3216 OR
- Mathematics: IM 3218, 3219, and 3221 OR
- Mathematics: 2104A, 2104B, 2104C, 3104A, 3104B, and 3104C OR
- Mathematics: 2101A, 2101B, 2101C, 3101A, 3101B, and 3101C

Science: One of the following patterns:

- Biology: IBT 3113, 3115, 3211, 3212A/B, 3214, and 3316 OR
- Biology: 2101A, 2101B, 2101C, 3101A, 3101B, and 3101C
- Chemistry: ICH 3111, 3112, 3113, 3114, 3116, 3117, 3118, and 3215 OR
- Chemistry: 2102A, 2102B, 2102C, 3102A, 3102B, and 3102C
- Geology: IS 3212
- Physics: IP 3111, 3112, 3213, 3215, and 3216 OR
- Physics: 2104A, 2104B, 2104C, 3104A, 3104B, and 3104C


### 4.3.5.2 Other Information

- English Language Proficiency Requirements will apply to all applicants.


### 4.3.6 Applicants for Mature Student Status

### 4.3.6.1 Admission Criteria

- An applicant, 21 years of age or older within one month after the beginning of the semester or the session to which admission is being sought, who has not fulfilled the admission criteria outlined in any of the above categories may be admitted to the University with the approval of the University Committee on Admissions.
- Applicants for mature student status will be required to submit proof of age; two letters of reference from persons competent to assess the candidate's ability to proceed with university studies; a letter from the applicant outlining the grounds for requesting special consideration; and high school marks and marks from post-secondary institutions, if applicable.
- Applicants will be required to submit a completed application for admission/readmission with the appropriate fee. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- Applicants for mature student status may be required to show through an interview that they possess the potential to proceed with university studies.
- Since admission as a mature student is not on the grounds of age alone, the University Committee on Admissions reserves the right to refuse admission to any applicant.


### 4.3.6.2 Other Information

- English Language Proficiency Requirements will apply to all applicants.


### 4.3.7 Applicants for Visiting Student Status

An applicant who wishes to enrol as a student at Memorial University of Newfoundland for a limited period of time and who does not wish to be admitted to a program for the purpose of completing a degree at this University may apply for admission under the Visiting Student category. This category includes, but is not limited to, students who are in good standing at their current or most recently attended post-secondary institution and who either:

- wish to complete one or more courses for the purpose of transferring the resulting credit to their home institutions; or
- wish to come to Memorial University of Newfoundland to complete an unpaid research internship under the supervision of a Memorial University of Newfoundland faculty member; or
- have been offered provisional acceptance to a Memorial University of Newfoundland graduate-level program subject to the completion of specific pre-requisite courses.


### 4.3.7.1 Application and Admission Criteria

- Applicants will be required to submit a completed Undergraduate Application for Admission/Readmission with the appropriate fee. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- Applicants for admission as visiting students will be required to supply one of either (1) a final official transcript from the most recent institution attended, (2) a Letter of Permission (LOP) from their current or former institution, or (3) confirmation of acceptance to the School of Graduate Studies.
- Visiting students enrolling at Memorial University of Newfoundland under an approved exchange agreement or as visiting interns will be required to submit a letter of recommendation from the head of the academic unit that will host the student confirming that the nature and duration of the student's visit and the courses for which the student will register.
- Visiting students are normally eligible to register at Memorial University of Newfoundland under this category for a maximum of two semesters and registration eligibility is subject to course availability and completion of course pre-requisites. For courses at a level beyond first year in particular, consultation with the academic unit offering course(s) of interest for the purpose of verifying registration eligibility, prior to submission of an application, is strongly encouraged.
- In order to obtain access to University resources and, where applicable a study permit, visiting research interns will be required to register for each semester of their visit for one of either (1) UGRD 5900 if they are visitors at the undergraduate student level or (2) GRAD 9900 if they are visitors at the graduate student level. Registration for one of these courses will be conducted by using a Course Change Form.
- Visiting research interns will be exempt from tuition fees. However, all visiting research students will be required, as a condition of registration, to participate in the University's mandatory health insurance plan and enrol in the University's recreation program.


### 4.3.7.2 Other Information

- English Language Proficiency Requirements and the regulations outlined under Admission/Readmission to the University will apply to all applicants.
- All visiting students are subject to all other applicable Memorial University of Newfoundland regulations as published in the University Calendar.


### 4.3.8 Applicants Who Are Senior Citizens

### 4.3.8.1 Admission Criteria

- An applicant, 60 years of age or older within one month after the beginning of the semester/session to which admission is being sought, may be admitted to the University as a senior citizen, upon submission of a birth certificate or other proof of age.


### 4.3.9 Applicants Who Have Followed the High School Curriculum of Another Country or a Recognized Standardized Curriculum

The criteria below apply to applicants who have completed a high school program and diploma under a curriculum sanctioned by a ministry of education or government jurisdiction other than the ministry of education of a province or territory of Canada or under an organization that offers internationally-recognized standardized examinations.
Applicants shall have completed the requirements for a recognized high school diploma or senior secondary certificate following completion of university-preparatory courses at, as a minimum, either the senior secondary or grade 12 level in the following five subject areas: Mathematics, English, Laboratory Science (Biology, Chemistry, Earth Systems/Geology, or Physics), Social Science or Modern or Classical Language, and an Elective. The courses in each subject area shall have been of a depth and breadth that prepares students to continue studies in the related subject areas at the undergraduate university level. An overall minimum average grade among the
courses used to satisfy admission requirements may also be required.

### 4.3.9.1 International Baccalaureate (IB)

- Applicants seeking admission on the basis of the International Baccalaureate Organization's IB Diploma program may be admitted upon award of the IB Diploma with a minimum total score of 24. See Transfer Credit regulations and www.mun.ca/undergrad/admissions/ib-chart.php for details regarding the University's IB transfer credit eligibility.


### 4.3.9.2 American-based High School Curriculum

- Applicants completing an American-based high school program are required to provide official transcripts reflecting a minimum overall average of " B " or better in the required five grade 12 subjects.


### 4.3.9.3 United Kingdom (UK) or UK-patterned Curriculum

- Applicants are required to have completed the General Certificate of Education (GCE) with at least five subjects. These must include at least three Advanced Subsidiary ("AS") Level subjects or two Advanced ("A") Level subjects with grades of "C" or better or, for applicants completing the Higher-Level subjects of the Scottish Leaving Certificate, at least two subjects at the Higher-Level with grades of " C " or better. Exceptional candidates may be admitted based upon Ordinary ("O") Level results. Applicants should refer to Transfer Credit for information concerning transfer credit eligibility.


### 4.3.9.4 France and French-Patterned Curriculum

- Applicants are required to complete and supply a certified copy of the Diplôme du Baccalauréat General (Diploma of General Baccalaureate) with a minimum grade of 12 in the required subject areas.


### 4.3.9.5 West Africa (Nigeria, the Gambia, Ghana, Liberia, and Sierra Leone)

- Applicants are required to complete the West African Examinations Council (WAEC) Senior School Certificate with a minimum grade of C6 in the required subjects. Applicants from Nigeria may also be considered based upon completion of National Examinations Council (NECO) examination results with a minimum grade of C 6 in the required subjects.


### 4.3.9.6 Caribbean (Anguilla, Antigua and Barbuda, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, and Turks and Caicos Islands)

- Applicants are required to hold a Caribbean Examinations Council Secondary Education Certificate (CESC) with a minimum grade of 2 in the required subject areas and a minimum of two 2 -unit subjects on the Caribbean Advanced Proficiency Examination (CAPE) examinations. Applicants who have completed Caribbean Advanced Proficiency Examination (CAPE) examinations may be eligible for transfer credit at the undergraduate level.
Further details regarding admission criteria by country are provided online at www.mun.ca/undergrad/admissions. Applicants may also contact the Admissions Office, Office of the Registrar by e-mail at admissions@mun.ca.


### 4.3.9.7 Other Information

- Early Acceptance: Applicants in their final year of high school who have completed, or who are completing, a slate of courses which meets the course requirements as specified under Applicants Who Have Followed the High School Curriculum of Another Country or a Recognized Standardized Curriculum may be granted early acceptance prior to the writing of final examinations. This early acceptance will be subject to verification, when final examination results are received by the Office of the Registrar from the appropriate authorities, that the applicant has met the minimum requirements for admission as specified under Applicants Who Have Followed the High School Curriculum of Another Country or a Recognized Standardized Curriculum. Applicants who fail to meet all requirements at that time will have their acceptance revoked. This does not preclude the application of selective admission criteria for particular faculty/school programs.
- Applicants from other countries should submit official matriculation certificates at least two months prior to the commencement of the semester to which they are seeking admission. Certificates in a language other than English or French should be accompanied by notarized English translations.
- Applicants from other countries may be required to submit with their application, a statement of satisfactory financial resources.
- English Language Proficiency Requirements will apply to all applicants.


### 4.3.10 Applicants Transferring From Other Recognized Universities or Colleges

### 4.3.10.1 Admission Criteria

- The admission of applicants from other recognized universities or colleges will be subject to the regulations for Admission/ Readmission to the University in addition to General Academic Regulations, Regulations for Continuance and Readmission. In order to allow sufficient time for assessment of possible transfer credit, applicants should refer to Transfer Credit for information on the transfer credit application and evaluation process and requirements.


### 4.3.10.2 Other Information

- In addition to the non-refundable application processing fee, an additional fee is required of all applicants who apply for admission from post-secondary institutions outside of Newfoundland and Labrador and/or non-Canadian applicants. Neither fee is refundable nor will it be credited to the applicant's financial account in any circumstances. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- Students applying for transfer from other recognized universities or colleges shall submit their high school transcript confirming receipt of a high school diploma and official transcript(s) from all universities and colleges attended. All documents must be forwarded directly to the Admissions Office, Office of the Registrar from the appropriate institution(s). These documents must be certified and official and received in the Office of the Registrar not later than two months prior to the first day of lectures in any semester, as stated in the University Diary. An application is not considered complete until these documents have been received.
- Applicants transferring from other universities or colleges should also see Transfer Credit.
- English Language Proficiency Requirements will apply to all applicants.


### 4.3.11 Applicants Who Are Requesting Special Admission

Where circumstances warrant, applicants not meeting the regulations for Admission/Readmission to the University may be admitted to Memorial University of Newfoundland with the approval of the University Committee on Admissions.

### 4.3.11.1 Admission Criteria

- Applicants must submit a completed application for admission/readmission with the appropriate fee. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- Applicants must submit a letter to the Committee outlining the grounds for requesting special consideration and provide a letter from a school principal, guidance counsellor, employer or other responsible person substantiating those grounds.
- In order to allow sufficient time for reasonable and consistent consideration of special cases, supporting letters must be received at least one week prior to the beginning of the semester to which admission is being sought.


### 4.3.11.2 Other Information

- English Language Proficiency Requirements will apply to all applicants.


### 4.4 Transfer Credit

Applicants wishing to be considered for advanced standing or transfer credit must submit, in addition to the Application for Admission/ Readmission, an Application for Transfer Credit Evaluation which can be obtained online or in-person from the Office of the Registrar. Official transcript(s) and calendar descriptions and/or outlines of courses claimed for credit are also required and should be sent directly to Memorial University of Newfoundland from the institution attended.
In order to allow sufficient time for evaluation, these documents should be received at least two months prior to the commencement of the registration period for the semester to which the applicant is seeking admission. It is the student's responsibility to provide the pertinent documents, and until they are received, the Office of the Registrar is unable to commence an evaluation or to advise students of their standing at this University. The award of transfer credit is subject to the following regulations:

- When transfer credit is awarded for work completed at another institution, only equivalent Memorial University of Newfoundland course(s) and credit(s) are recorded on the Memorial University of Newfoundland transcript. Grades received from other institutions are not recorded nor included in averages.
- Applicants who have not received the results of a transfer credit evaluation prior to the assigned registration time for the semester in which they propose to begin studies should contact the Admissions Office for further assistance.
- Memorial University of Newfoundland will consider for transfer credit courses for which credit has been granted through a Prior Learning Assessment and Recognition process by another recognized university or college.
- Award of credit will be subject to University Regulations and evaluation and recommendation by the appropriate academic unit(s).
- Due to its specific or unique nature, a course (e.g. capstone or clinical course) may be identified as being exempt from the transfer credit review process.
- A minimum grade may, in some circumstances, be required by a faculty/school in order to award transfer credit.
- The applicability of all transfer credits, whether specified or unspecified, is subject to appropriate program regulations.
- Information regarding course equivalencies can be obtained from the Admissions Office, Office of the Registrar.

Outlined below are the various categories for which transfer credit may be considered.

### 4.4.1 College Board Adyanced Placement (AP)

- Award of credit for AP courses will be subject to the achievement of a minimum grade of 3 in each subject claimed for credit (in certain subjects a minimum grade of 4 may be required).


### 4.4.2 Enriched Courses and Ontario Grade XIII/OAC

- Certain Grade XII enriched courses and certain Ontario Grade XIII/OAC subjects may be recognized for introductory (normally first year) credits, where applicable, provided that the subjects claimed for credit are recommended as equivalent to Memorial University of Newfoundland courses by the relevant University academic unit(s). In addition, the applicant must have obtained an overall average in these courses of not less than $65 \%$ with a passing grade in each subject claimed for credit. Applicants who have not obtained the overall average requirement of $65 \%$ in these courses will be required to have obtained a mark of not less than $65 \%$ in individual subjects claimed for credit.


### 4.4.3 Advanced or Higher Levels

- The "Advanced Level" subjects of the General Certificate of Education will generally be accepted for credit to a maximum of 12 credit hours in each subject provided that a minimum grade of ' $D$ ' in each subject claimed for credit has been obtained.
- The "Higher Level" subjects of the Scottish Leaving Certificate will generally be accepted for credit at the first year level.


### 4.4.4 International Baccalaureate Diploma

- Memorial University of Newfoundland will consider for transfer credit the "Higher Level" subjects and certain "Standard" or "Subsidiary" level subjects, provided that the subjects claimed for credit are recommended as equivalent to Memorial University of Newfoundland courses by the relevant University academic unit(s), and the candidate has achieved a minimum grade of 4 in individual subjects claimed for credit. In certain subjects a minimum grade of 5 may be required.


### 4.4.5 Member Institutions of Universities Canada

- All university-level course work completed by transfer students during the first two years of university study taken at universities/ colleges that are ordinary members of Universities Canada will be recognized for transfer credit. In the first instance, the evaluation of such course work for appropriate credit will be conducted by University academic units. In instances where appropriate credit cannot be granted by academic units or where no University academic unit exists at this University for the evaluation of particular transfer credits, the Office of the Registrar will award the appropriate unspecified credits in an unspecified discipline.
- Applicants who have completed course work beyond the first two years of university study may be considered for further transfer credit subject to evaluation and recommendation by the appropriate academic unit(s) and University Regulations.


### 4.4.6 Other Universities, Colleges and Institutes

- Memorial University of Newfoundland may recognize for transfer credit certain courses offered by the College of the North Atlantic, the Fisheries and Marine Institute of Memorial University of Newfoundland, and certain other community colleges, technical colleges, institutes and CEGEPs.
- Memorial University of Newfoundland may recognize for transfer credit certain courses offered by other recognized universities or university colleges.


### 4.4.7 Caribbean Advanced Proficiency Exams

- Memorial University of Newfoundland may recognize for transfer credit certain courses completed through the Caribbean Advanced Proficiency Examinations. These examinations will generally be accepted for credit to a maximum of 12 credit hours for each 2 unit course and 6 credit hours for each 1 unit course.


### 4.5 Prior Learning Assessment and Recognition (PLAR)

Memorial University of Newfoundland recognizes that learning may occur outside a formal institutional setting through professional or personal experience or through participation in unaccredited learning. Students of Memorial University of Newfoundland may be éligible for the award of credit for informal or non-formal learning in specific circumstances. Where PLAR is offered, it is available only to those students who have applied for admission or who are currently registered at the University. PLAR at Memorial University of Newfoundland is subject to the following regulations and procedures:

- The recognition of informal learning, assessed on the basis of recognized professional achievement, may exist in the form of program admission, advanced placement, or academic credit in selected programs. Students are advised to consult the regulations governing programs of interest in the appropriate section of the University Calendar for further information
- The recognition of learning that has not been recognized through the award of credit, for the purposes of determining pre-requisite waiver eligibility, may be approved by academic units on the basis of interviews or a review of unofficial documents. Students are advised to contact the academic unit offering the course(s) involved for further advice.
- Assessment of learning in the form of written or practical challenge examinations may be offered at the discretion of academic units. Recognition of learning assessed through challenge examinations is subject to the regulations outlined below.
- PLAR may be used to receive credit for Work Terms or Internships at the discretion of the individual faculty or school.


### 4.5.1 Challenge for Credit

Where challenge for credit is offered, it is available under the following conditions

1. Applications to challenge for credit are available online at www.mun.ca/regoff/forms.php or in-person at the Office of the Registrar. Completed applications must be submitted to the Office of the Registrar and must receive approval from the head of the academic unit offering the course(s). The academic unit may require documentary material from the student and/or an interview before making its decision whether or not to accept the challenge. The academic unit involved will be responsible for deciding the scheduling and appropriate method of evaluation, which may consist of a variety of possible modes of evaluation including written, practical and oral.
2. A student who has applied for transfer credit evaluation may not apply to challenge for credit until the transfer credit evaluation has been completed.
3. Memorial University of Newfoundland will consider for credit courses that have been granted credit through a challenge for credit process by another recognized university or college. Award of credit will be subject to University Regulations and evaluation and recommendation by the appropriate academic unit(s).
4. For the purpose of satisfying the regulations governing residence requirements for a first degree and residence requirements for a second degree under General Academic Regulations (Undergraduate), a successful challenge for credit shall be considered the equivalent of a transfer credit and shall be recorded on the transcript as a pass (PAS). Challenge grades are not included in averages. For further information refer to Residence Requirements for a First Degree and Residence Requirements for a Second Degree.
5. The appropriate fee must be paid at the time of application. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/. If the application is accepted for consideration, the fee is not refundable nor is the student permitted to withdraw the challenge.

## 5 Academic Advising

During their period of study at the University, students are expected to make some very important academic decisions, the consequences of which can significantly affect the course of their academic careers. While the responsibility for making these decisions rests with students individually, they are not expected to make such decisions without access to sound academic advice.
Students should seek advice on matters such as course selection, registration, dropping/adding course registrations, selecting/changing an academic program, entrance requirements for degree programs and interpretation of university regulations. It is especially true that students in the early stages of their degree program should seek academic advice.
Students who are considering enrolling at the University or who are in their first year of study at the University or who have not declared an academic program can obtain academic advice from the following sources: those students attending the St. John's Campus should contact the Academic Advising Centre, Office of the Registrar, located in the Science Building room SN 4053, at (709) 864-8801; those students attending the Grenfell Campus should contact the Manager, Academic Advising at the Office of the Registrar, located in the Arts and Science Building in room AS 270, at (709) 637-6298.
Students beyond their first year who have declared their major or have been accepted to a School or Faculty can obtain academic advice from a faculty adviser assigned by their School/Faculty/Department. Students should contact the head of the relevant academic unit to be assigned a faculty adviser.
Students are also encouraged to approach their professors for academic advice or for referral to the appropriate source of advice.
While it is the responsibility of students to see that their academic programs meet regulations in all respects, academic advice is provided as a service of the University.
Further information regarding academic advising at the St. John's Campus may be obtained by e-mail at advice@mun.ca or through the website at www.mun.ca/advice.
Further information regarding academic advising at Grenfell Campus may be obtained by e-mail at info@grenfell.mun.ca or through the website at www.grenfell.mun.ca/campus-services/Pages/academic-advising.aspx.

## 6 General Academic Regulations (Undergraduate)

Memorial University of Newfoundland is governed by the principles of fairness, academic integrity and the timely provision of information and by regulations whose purpose is to ensure fair and equitable treatment for the entire University community. Some regulations deal with the normal workings of the University (continuance, registration deadlines, etc.) and pertain to all undergraduate students. Other regulations, however, especially those concerned with classification of degrees and academic conduct, apply to certain students in certain specific situations.
The Office of the Registrar will assist students with any questions or problems which arise concerning the interpretation of regulations. It is, however, the responsibility of the student to see that the student's program meets University regulations in all respects. Every student has the right to request waiver of General Academic Regulations (Undergraduate). In addition, every student has the right to appeal decisions resulting from a request for waiver of General Academic Regulations (Undergraduate). For further information refer to Waiver of Regulations and Appeal of Decisions.
Descriptions and regulations for individual programs can be found in the appropriate academic unit section of this Calendar. The terminology is explained in the Glossary of Terms Used in This Calendar.

### 6.1 Classification of Students

1. Full-time students:
a. Students who have been admitted to this University and who are registered for the duration of any semester in at least 9 credit hours or at least 5 credit hours in a session are deemed full-time students.
b. Notwithstanding the above and the regulations governing the Marine Institute technology diploma programs, students who have been declared as pre-Bachelor of Technology or pre-Bachelor of Maritime Studies are deemed full-time students if they are registered for either: three non-degree courses and a minimum of 3 degree credit hours, or two non-degree courses and a minimum of 6 degree credit hours.
c. Students who are registered for the duration of any semester in a co-operative education work term, the internship required of the Co-operative Internship in Computer Science (CICS), the International Internship Option in the International Bachelor of Arts (INTL 399W), or the Structured Practice Experiences, the Professional Practice Experiences, and the Advanced Professional Practice Experiences required of the School of Pharmacy will be deemed full-time students.
d. Provided they had been admitted to the University, the members of the Executive of the Memorial University of Newfoundland Students' Union (MUNSU), the Grenfell Campus Student Union (GCSU) and the Marine Institute Student Union (MISU) shall be deemed, for the purpose of membership on University committees, the Senate and the Board of Regents, to be full-time students during their tenure.
2. Part-time students are students who have been admitted to the University and who are registered for fewer than 9 credit hours in any semester or fewer than 5 credit hours in any session
3. First-year students are students who have earned fewer than 18 credit hours.
4. Second-year students are students who have earned from 18 to 47 credit hours inclusive
5. Third-Year Students are students who have earned from 48 to 77 credit hours inclusive.
6. Fourth-Year Students are students who have earned from 78 to 107 credit hours inclusive.
7. Fifth-Year Students are students who have earned not fewer than 108 credit hours.

### 6.2 Degree and Departmental Regulations

Every student seeking a bachelor's degree shall comply with all the course requirements governing the award of that degree.

### 6.2.1 Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science

1. A student completing a degree program in the Faculty of Hymanities and Social Sciences or in the Faculty of Science will normally follow the degree regulations in effect in the academic year in which the student first completes a course(s) at Memorial University of Newfoundland. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.
2. In the case of departmental regulations for a major or minor, a student will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000 level or above which may be applied to the major or minor program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.

### 6.2.2 Year of Degree and Departmental Regulations - All Other Faculties and Schools

1. A student registered in âny program, other than programs in the Faculty of Humanities and Social Sciences, programs in the Faculty of Science, the Bachelor of Business Administration program offered by the Faculty of Business Administration, or in the Bachelor of Maritime Studies or Bachelor of Technology programs offered by the Fisheries and Marine Institute will normally follow regulations in effect in the academic year in which the student first completes a course(s) in the faculty or school following formal admission to that program. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.
2. A student completing a Bachelor of Business Administration will normally follow the degree regulations in effect in the academic year in which the student first earns a total of 12 credit hours in Business courses at the 1000 -level. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.
3. A student who has been admitted to and who is currently completing courses in one of the Fisheries and Marine Institute diploma programs that meets the admission criteria to the Bachelor of Technology program may simultaneously complete the requirements for the Bachelor of Technology program. Under those circumstances, for the purpose of meeting Degree and Departmental Regulations, Year of Degree and Departmental Regulations - All Other Faculties and Schools, students will normally follow the degree regulations in effect in the academic year in which the student first completes an undergraduate degree course in the Technology (TECH) subject area. However, the student may elect to follow subsequent regulations introduced during the student's tenure in the program.
4. For the purpose of meeting Degree and Departmental Regulations, Year of Degree and Departmental Regulations - All Other Faculties and Schools, a student who is completing the Bachelor of Maritime Studies/Bachelor of Technology will normally follow the degree regulations in effect in the academic year in which the student first completes a course(s) in the program following formal
admission to that program. However, the student may elect to follow subsequent regulations introduced during the student's tenure in the program.
5. A student in the Bachelor of Commerce (Co-operative) program, the International Bachelor of Business Administration program, or in the Faculty of Education, Faculty of Engineering and Applied Science, Faculty of Nursing, Faculty of Medicine, School of Pharmacy, or School of Social Work, who fails to obtain promotion or is not registered for full-time studies for more than one semester and is readmitted to full-time studies in the faculty or school will normally follow regulations in effect at the time of readmission.
6. A student in the School of Music who is required to withdraw from the Bachelor of Music degree program for academic reasons, or who has withdrawn from the principal applied study course will normally follow regulations in effect at the time the student is readmitted to the School. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.

### 6.2.3 Further Credentials

1. Students may obtain more than one undergraduate degree at this University but not in the same major subject. Students are also encouraged to consider proceeding to more advanced studies at the honours or graduate level.
2. A student will not be awarded the same bachelor's degree more than once by this University (e.g., if a student has been awarded a Bachelor of Arts degree from this University the student will not be awarded a second Bachelor of Arts degree from this University).
3. A student who has completed a Bachelor's degree from this University may complete the requirements for another major or minor. A notation indicating the completion of the requirements for the additional major or minor will be included on the student's academic record.
4. For further information refer to Residence Requirements - Second Degree.

### 6.2.4 Time Limits

1. Notwithstanding these regulations, the University may place limits on the time permitted to complete a program under any given set of regulations. In addition, detailed scheduling of courses and/or practical experience, e.g., work terms, internships, field placements, may be changed as the University deems appropriate or necessary.

### 6.3 Residence Requirements

### 6.3.1 General Information

1. Residence requirements are met by attendance at classes on a campus and/or by the number of credit hours completed at this University.

### 6.3.2 First Degree

1. More than half of the total credit hours required for the degree shall consist of the following:

- Courses taken at this University.
- Courses taken at universities and/or colleges which are included in formal institutional exchange agreements with this University.
- Courses taken at Francophone universities, as required under specific degree program regulations.

2. Students who have taken courses in the subject(s) of their major at another university are required to complete more than half of the total credit hours in each of their major subjects at this University.

### 6.3.3 Second Degree

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A student who has already completed a bachelor's degree may undertake a second bachelor's degree, but not in the same major, subject to the condition outlined below:

1. Every student for a second bachelor's degree shall complete at least 30 credit hours at this University beyond those required for the first degree. These credit hours must be applicable to the degree sought. Students who have completed a first degree at this University may be permitted to take at another university up to 6 of the 30 credit hours required in this clause. For the Bachelor of Maritime Studies and the Bachelor of Technology degrees see under Fisheries and Marine Institute, Degree Program Regulations.

### 6.4 Special/Selected Topics Courses

When a block of courses has been approved under a general heading such as selected topics, special areas, directed readings or like heading, each new course offered from that block of courses shall be approved in advance by the Faculty/School Undergraduate Studies Committee. To ensure an orderly use of the courses and non-duplication between course numbers, titles and contents, the Committee shall require the same quality and type of information as is needed for the approval of any single course.

### 6.5 Registration

### 6.5.1 General Information

1. Students register using the Student Web/Self-Service at www.mun.ca/regoff.
2. No student may register after the end of the registration period. In the case of accelerated courses and courses offered outside the normal time frame of a semester or session the registration period will be prorated with respect to all associated deadlines.
3. The University reserves the right to require a student to withdraw without academic prejudice from a course, courses, or program in which the student is improperly registered.

### 6.5.2 Student Responsibility

1. Students are strongly encouraged to seek academic advice before registering.
2. The responsibility for taking all steps necessary for registering and ensuring that a student's registration is appropriate, correct, and proper rests solely with the student. The University will make every effort, through its various academic counselling and advising services, to ensure that students are informed of the suitability and accuracy of their registrations.
3. Students must register for courses at or after the assigned registration time and before the end of the registration period as defined in the University Diary.

### 6.5.3 Registration Priority

1. The University uses a registration priority system that assigns the date and time that students register. Priority for registration is determined by a combination of three factors: closeness to graduation (i.e., number of credit hours completed); a student's academic achievement (i.e., GPA), and a student's program of study (i.e., degree, major, minor).
2. Academic units may reserve spaces in course sections for students in a particular degree, major, minor, or the like.
3. For further information on registration priority consult the Undergraduate Registration Procedures.

### 6.5.4 Adding Courses

### 6.5.4.1 General Information

- Specific deadlines for adding courses in any semester or session are stated in the University Diary. In the case of sessions, accelerated courses, and courses offered outside the normal time frame of a semester or session, deadlines for adding courses will be prorated accordingly.
- No course will be considered to have been added until the Registrar has received official notification and certified the add.
- Attending classes or informing an instructor of the intent to add a course does not constitute an official adding of a course.
- Only under special circumstances may a course(s) be added after the end of the registration period. For information contact the Office of the Registrar.
- Before the end of the registration period a student may, upon formal notification to the Registrar, change the course(s) for which the student was originally registered by adding and/or dropping a course(s).


### 6.5.5 Course Weight/Course Load

Course load is the sum of course weights. In a session the course load is double. For the purposes of determining course load, each course is weighted with the credit hour value associated with that course, unless otherwise specified as follows:

- The course weight of each of the $A$ and $B$ components of a linked course shall be equivalent to one half of the credit hour value of the B component.
- The course weight of courses with C or F as the last character shall be three.
- The course weight of courses with W as the last character will vary according to individual program requirements.

1. Semester Course Load: The normal course load in a semester shall be 15 credit hours, except where academic regulations require more than that number. No student shall register for more than 15 credit hours or more credit hours than required by degree regulations in a semester except with the written permission of the dean, division head, vice-president or associate vice-president of the student's faculty, school, or campus.
2. Session Course Load: The normal course load in a session shall be 6 credit hours. No student shall register for more than 6 credit hours in a session except with the written permission of the dean, division head, vice-president or associate vice-president of the student's faculty, school, or campus.

### 6.5.6 Dropping Courses

### 6.5.6.1 General Information



- Specific deadlines for dropping courses in any semester or session are stated in the University Diary. In the case of sessions, accelerated courses, and courses offered outside the normal time frame of a semester or session, deadlines for dropping courses without academic prejudice will be prorated accordingly.
- No course will be considered to have been dropped until the Registrar has received official notification and certified the drop.
- Ceasing to attend classes, or informing an instructor of the intent to drop a course, does not constitute an official dropping of a course.
- A student who drops all courses in any given semester will be considered to have withdrawn from the University for that semester. A student who has withdrawn from the University, before the start of classes in any semester, is deemed to be not registered for that semester. For information regarding applying for readmission to the University refer to Admission/Readmission to the University (Undergraduate).
- In the event that a student drops a co-requisite course, the student will be required to drop the course for which that course is a corequisite.
- Before the end of the registration period a student may, upon formal notification to the Registrar, change the course(s) for which the student was originally registered by adding and/or dropping a course(s).


### 6.5.6.2 Dropping Courses Without Academic Prejudice

- Until the end of the second week following the first day of lectures in any semester, a student may, upon formal notification to the Registrar, drop a course without academic prejudice. A course dropped under these circumstances will not be entered on the student's record.
- From the beginning of the third week to the end of the eighth week following the first day of lectures in any semester, a student may, upon formal notification to the Registrar, drop a course without academic prejudice. A grade of DR will be assigned in these circumstances and will be entered on the student's record.
- From the beginning of the ninth week following the first day of lectures in any semester to the last day to add courses in the following semester, a student who is prevented from completing the requirements of a course by illness, bereavement, or other acceptable cause, duly authenticated in writing, may drop a course without academic prejudice. This may occur only with the approval of both the course instructor and the head of the academic unit of the student's program or in the case of students who have not declared a program, the head of the academic unit of the course in question. A grade of DR will be assigned in these circumstances and will be entered on the student's record.


### 6.5.6.3 Dropping Courses Retroactively

An academic transcript is a complete and accurate reflection of a student's academic record. Once the final exam is written the course will be considered to be completed and, normally, no retroactive drop will be possible. A poor grade is not, in and of itself, acceptable grounds for dropping a course retroactively. On rare occasions, a student may request to drop a course retroactively (i.e. beyond the last day to add courses in the semester following the one in which the course was taken). Normally, such requests will be considered only for courses that were not completed as a result of circumstances beyond the student's control such as illness, bereavement, or other acceptable cause, duly authenticated. If a request for a retroactive drop is approved, a grade of DEX (Drop due to Exceptional Circumstances) will be assigned in these circumstances and entered on the student's record. Requests shall be submitted to the Office of the Registrar by e-mail to appeals.retrodrops@mun.ca no later than five years following the last day of examinations for the semester in which the course was taken. Requests must include the following information:

- name,
- current address and telephone number,
- Memorial University of Newfoundland email address,
- student ID number,
- course(s) requested to drop retroactively,
- explanation of why course(s) could not be dropped during regular time frame for dropping,
- grounds for the request,
- supporting documentation, and
- documentation from the course instructor regarding grading scheme and final grade.


### 6.5.6.4 Work Terms

Students registered for a co-operative education work term should refer to the appropriate academic unit section of this calendar with respect to regulations regarding work terms.

### 6.5.6.5 Tuition Fee Implications

- A student who drops a course within two weeks following the first day of lecture in any semester will not be liable for tuition fees for that course. Tuition fee refunds for dropping courses after that period will be prorated in accordance with Tuition and Related Fees, Tuition refunds based on withdrawal from course(s). Further Information can be found at the Financial and Administrative Services website at www.mun.ca/finance/fees/.
- In the case of sessions, accelerated courses, and courses offered outside the normal time frame of a semester or session, deadlines for dropping courses without financial liability will be prorated accordingly.


### 6.5.7 Withdrawing from the University

### 6.5.7.1 General Information

- A student who drops all courses in any given semester will be considered to have withdrawn from the University for that semester. A student who has withdrawn from the University, before the start of classes in any semester, is deemed to be not registered for that semester. For information regarding applying for readmission to the University refer to Admission/Readmission to the University (Undergraduate).
- A withdrawal is not official until the Registrar has received official notification and certified the changes.
- Ceasing to attend classes, or informing an instructor of the intent to drop a course, does not constitute an official withdrawal.


### 6.5.7.2 Withdrawing from the University Without Academic Prejudice

- Until the end of the second week following the first day of lectures in any semester as stated in the University Diary, a student may, upon formal notification to the Registrar, withdraw from the University without academic prejudice. Courses dropped under these circumstances will not be entered on the student's record,
- From the beginning of the third week to the end of the eighth week following the first day of lectures in any semester as stated in the University Diary, a student may, upon formal notification to the Registrar, withdraw from the University without academic prejudice. The letter grade DR will be assigned to all courses in these circumstances.
- From the beginning of the ninth week following the first day of lectures in any semester to the last day to add courses in the following semester as stated in the University Diary, a student who is prevented from completing the semester by illness, bereavement, or other acceptable cause, duly authenticated in writing, may withdraw from the University without academic prejudice. This may occur only with the approval of the dean, division head, vice-president or associate vice-president of the student's faculty, school, or campus and upon formal notification to the Registrar. The letter grade DR will be assigned to all courses in these circumstances.
- In the case of sessiôns, accelerated courses, and courses offered outside the normal time frame of a semester or session, deadlines for withdrawing from the University will be prorated accordingly.
- Students who withdraw from the University for medical reasons for one or more semesters may not be permitted to re-enter unless they can provide medical evidence, satisfactory to the Director of Student Health Service, of fitness to pursue studies.


### 6.5.7.3 Withdrawing from the University Retroactively

An academic transcript is a complete and accurate reflection of a student's academic record. Once the student has written one or more final exams, the semester will be considered to be completed and, normally, no retroactive withdrawal will be possible. Poor grades are not, in and of themselves, acceptable grounds for withdrawing retroactively. On rare occasions, a student may request to withdraw from the University retroactively (i.e. beyond the last day to add courses in the semester following the one in which the courses were taken). Normally, such requests will be considered only for courses that were not completed as a result of circumstances beyond the student's control such as illness, bereavement, or other acceptable cause, duly authenticated. If a request for a retroactive withdrawal is approved, a grade of DEX (Drop due to Exceptional Circumstances) will be assigned in these circumstances and entered on the student's record. Requests shall be submitted to the Office of the Registrar no later than five years following the last day of examinations for the semester in which the courses were taken. Requests must include the following information:

- name,
- current address and telephone number,
- Memorial University of Newfoundland email address ,
- student ID number,
- semester(s) for which retroactive withdrawal is requested,
- explanation of why course(s) could not be dropped during regular time frame for dropping,
- grounds for the request,
- supporting documentation, and
- documentation from the course instructors regarding grading scheme and final grade.


### 6.5.7.4 Work Terms

Students registered for a co-operative education work term should refer to the appropriate academic unit section of this calendar with respect to regulations governing withdrawing from work terms.

### 6.5.8 Completing a Course

1. When it is prescribed that students, once registered, must complete a particular course, it is understood that they shall, when required, attend lectures given in the course, perform laboratory projects, and exercises that may be assigned and any other written or oral exercises prescribed, write or otherwise answer tests and examinations given in the course throughout the semester or session, including any final examinations, and shall obtain an overall passing grade in the course in accordance with the prescribed evaluation procedures.

### 6.5.9 Auditing of Courses

1. Individuals auditing courses must have met the University's admission or readmission requirements as stated in Admission/ Readmission to the University (Undergraduate).
2. In order to audit any course, an individual must receive permission from the instructor in that course and the head of the academic unit in which the course is offered. Permission cannot be given until the number of registrations is known. Factors to be considered shall include class size, impact on students registered for credit, and other matters judged relevant by the academic unit.
3. Individuals auditing courses shall limit their participation to that deemed appropriate by the instructor.
4. Auditors are not permitted to write formal examinations or have their work formally assessed.
5. Audited courses will not be considered as meeting prerequisites, admission, or course requirements for any undergraduate programs, nor will audited courses be listed on the individual's transcript of University studies.

### 6.6 Attendance

1. Attendance regulations must be approved by the Senate and will be allowed only in cases where the academic unit has demonstrated that attendance is necessary for safety reasons, for teaching practical skills, or for attaining other clearly specified objectives. This may include an attendance regulation that may, by itself, cause a student who contravenes the regulation to fail or be dropped from a course.
2. The course where an attendance regulation is to be enforced must have the statement "attendance required" included in the calendar description.

### 6.7 Evaluation of Student Work

### 6.7.1 Method of Evaluation

1. The method of evaluation in any course shall be determined by the academic unit subject to all University regulations.

### 6.7.2 Course Syllabus

1. Before the end of the first week of lectures in any semester or session, the course syllabus shall be made known to students. The course syllabus shall include:

- the method of evaluation,
- any required prerequisites or co-requisites,
- any required textbooks or other resources which must be purchased,
- information about the availability of the instructor for consultation (in-person and, where appropriate, by other means of communication) outside of class,
- a statement of Memorial University of Newfoundland's commitment to accommodation of students with disabilities, and
- a statement regarding academic integrity, including a reference to the entry on Academic Misconduct in this Calendar.

2. The following shall be included in the explanation of the method of evaluation:

- the allocation of marks for all parts of the evaluation, e.g., assignments, laboratory projects, presentations, tests, mid-term examinations, final examinations;
- wherever possible, an explanation of the alternate evaluation which will be offered to students who are unable to complete a part of the evaluation due to acceptable cause, as described under Exemptions from Parts of the Evaluation; and
- with the exception of the final examination, and in accordance with Scheduling of Parts of the Evaluation below, the probable dates of all in-class parts of the evaluation, and the probable dates on which all take-home parts of the evaluation are due.

3. The course syllabus shall be provided in paper form to students present in class, or in electronic form via a University approved email account or learning management system.
4. As early as possible following the start of lectures in each semester or session, and no later than the end of the first week of lectures, the course instructor shall file a copy of the course syllabus with the appropriate academic unit.
5. Methods used for notification of grades earned in all parts of the evaluation and for the return of graded evaluative instruments will be in keeping with the Access to Information and Protection of Privacy Act (Government of Newfoundland and Labrador).

### 6.7.3 Scheduling of Parts of the Evaluation

1. Every effort should be made to adhere to the dates given on the course syllabus. Deviations from these dates of one calendar week or less are subject to the restrictions listed in clauses 2 to 5 . Longer deviations are permitted only as described under Changing the Method of Evaluation.
2. No laboratory examinations totalling more than one laboratory period in length shall be given in any laboratory course in any week during a lecturing period in any semester or session. Such examinations shall be administered in the laboratory time period assigned for that course section. The application of this clause in the Faculty of Engineering and Applied Science, the Faculty of Medicine and
the School of Pharmacy is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for laboratory examinations in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such laboratory examinations do not conflict with regularly scheduled meetings of another course for any student involved.
3. Any other in-class work shall not extend beyond the class period assigned to that course section in any week during a lecturing period in any semester or session. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for in-class work in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such in-class work does not conflict with regularly scheduled meetings of another course for any student involved.
4. No form of evaluation shall take place or be due during the last two weeks of the lecturing period in any semester or the last week of the lecturing period in any session, with the exception of oral exams and presentations, laboratory exams and reports, grading on participation, and take-home work which has been made available to students prior to this part of the lecturing period. Courses taught outside the regular time frame are exempt from the application of this regulation. In exceptional circumstances, the undergraduate studies committee of the appropriate faculty or school may, upon the recommendation of the head of an academic unit, grant a waiver of this regulation with the proviso that the total value of all parts of the evaluation thereby permitted shall not exceed $20 \%$ of the final mark in that course. At the end of each semester, the Senate Committee on Undergraduate Studies must be notified of waivers granted.
5. No evaluation of any nature shall be held or due between the last day of lectures and the start of the formal examination period in any semester or session. The application of this clause to the Faculty of Education (with respect to accelerated courses), the Faculty of Medicine, the School of Human Kinetics and Recreation (with respect to accelerated courses and courses offered outside the normal time frame during the Spring semester) and the Faculty of Nursing is subject to interpretation by the appropriate committee on undergraduate studies.
6. In the event of an officially declared emergency which results in the cancellation or interruption of in-class work previously scheduled and notified to be held in the final class period of the third last week of lectures of a semester or the second last week of lectures of a session, teaching units may reschedule such work in the next regularly scheduled class or as early as possible in the second last week of lectures of a semester or the last week of lectures of a session. In no circumstances can the rescheduled work be held in the last week of lectures of a semester.

### 6.7.4 Changing the Method of Evaluation

1. The method of evaluation, as made available to the class in the first week of lectures, shall be changed only if:

- exceptional circumstances warrant the change; and
- the head of the academic unit approves the proposed change; and
- accommodation is made for students who demonstrate to the course instructor that they are disadvantaged by the change.


### 6.7.5 Exemptions from Parts of the Evaluation

1. For information and procedures regarding exemptions from final examinations, refer to Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations.
2. A student is, at times, prevented from completing a part of the evaluation by illness or medical conditions of less than five calendar days' duration. In such cases, a student may apply for an alternate evaluation by declaring to the relevant instructor that the student has experienced such an illness or medical condition. This declaration should be made via telephone or in writing through the student's University approved e-mail account. This declaration should be made in advance of the original date on which an in-class part of the evaluation is to be held or a take-home part of the evaluation is due, wherever possible, but no later than 48 hours after the original date of the part of the evaluation. If the declaration is made by telephone, written confirmation must then be received by the relevant instructor within seven calendar days of the original date of the part of the evaluation.
3. A student who is prevented from completing a part of the evaluation by illness of at least five calendar days' duration, bereavement or other acceptable cause, duly authenticated in writing, may apply for an alternate evaluation. This application should be made in advance of the original date on which an in-class part of the evaluation is to be held or a take-home part of the evaluation is due, wherever possible, but no later than 48 hours after the original date of the part of the evaluation. If application is made by telephone, written confirmation must then be received by the head of the appropriate academic unit within seven calendar days of the original date of the part of the evaluation. The following supporting documentation is required:

- For illness or medical conditions, medical documentation from a health professional is required. Students should provide the health professional with a copy of the Student Medical Certificate.
- For bereavement or other acceptable cause, official documents or letters that support the reason for the request (e.g. death certificate, letter from employer, etc.) are required.

4. The alternate evaluation may consist of the deferral of in-class work, the extension of the deadline for take-home work, an alternative allocation of marks, or another appropriate accommodation as determined by the course instructor. A student who is dissatisfied with the accommodation offered by the instructor may consult with the head of the appropriate academic unit.

### 6.7.6 Correction and Return of Student Work

1. Provided that students submit work by the due date outlined in the method of evaluation, instructors shall mark and return work that is worth a total of at least $20 \%$ of the final grade before the last day to drop courses without academic prejudice. This excludes practicums, placements, internships, theses, and courses where a single piece of work is used to determine the entire mark for the course. In exceptional circumstances, a waiver of this clause may be granted to an individual section of a course in a given semester upon application by the course instructor. For courses at the 1000- and 2000 -level, such a waiver may be granted by the Senate Committee on Undergraduate Studies. For all other courses, such a waiver may be granted by the undergraduate studies committee of the appropriate faculty or school; at the end of each semester, the Senate Committee on Undergraduate Studies shall be notified of waivers granted.
2. Instructors shall mark and return all work in a timely manner. In courses where evaluation includes a final examination, instructors shall make all reasonable efforts to mark and return all work before the beginning of the examination period, provided that students submit this work by the due date specified in the method of evaluation.

### 6.8 Final Examinations

### 6.8.1 Scheduling of Final Examinations

1. Final examinations, if any, whether of the normal two-hour duration or longer, shall be held in each course at the end of the semester or session during which it was given in accordance with the schedule of examinations published by the Office of the Registrar. The application of this clause to the Bachelor of Education (Intermediate/Secondary) and all degree programs offered by the School of Human Kinetics and Recreation is subject to interpretation by the appropriate committee on undergraduate studies.
2. Normally, course sections offered during the day will have their final examinations, if any, scheduled in the day, and course sections offered in the evening will have their final examinations, if any, scheduled in the evening. When a student is unable, for good reason, to write a final examination scheduled outside the provisions of this clause, the student will be entitled to write a deferred examination. For further information refer to Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations.
3. When an academic unit determines that there will be a common final examination for day and evening sections of a course, students must be so informed in the course syllabus.
4. Where possible, academic units should inform the Office of the Registrar when they submit their class schedules if it is anticipated that a common final examination will be required for day and evening sections of a course, so that this information can be publicized in the class schedule for the appropriate semester or session. Academic units should indicate whether the examination is to be held during the day or the evening.

### 6.8.2 Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations

1. A student who is prevented from writing a final examination by acceptable cause may apply, with supporting documents, to have the course graded based on the work completed or have the final examination deferred.
2. For a student who is prevented from writing a final examination as described under Scheduling of Final Examinations, the application to defer this examination should be made in writing to the head of the appropriate academic unit (or delegate). It should be submitted as soon as possible after the release of the final examination schedule, and in any case no later than two weeks before the end of the semester or session.
3. A student who is scheduled to write three final examinations which begin and end within a twenty-four-hour period may request to write a deferred examination. Normally, only the second examination in the twenty-four-hour period may be deferred. The application to defer this examination should be made in writing to the head of the appropriate academic unit (or delegate). It should be submitted as soon as possible after the release of the final examination schedule, and in any case no later than two weeks before the end of the semester or session.
4. For a student who is prevented from writing a final examination by illness, bereavement or other acceptable cause, duly authenticated in writing, the application to defer this examination should be made via telephone or in writing through the student's University approved e-mail account to the head of the appropriate academic unit (or delegate) and the course instructor. This application should be made in advance of the examination wherever possible, but no later than 48 hours after the original date of the examination. If application is made by telephone, written confirmation must then be received by the head of the appropriate academic unit (or delegate) within seven calendar days of the original date of the examination. The following supporting documentation is required:

- For illness or medical conditions, medical documentation from a health professional is required. Students should provide the health professional with a copy of the Student Medical Certificate.
- For bereavement or other acceptable cause, official documents or letters that support the reason for the request (e.g. death certificate, letter from employer, etc.) are required.

5. The decision regarding the request of the student to have a course graded based on the work completed or have the final examination deferred, including information on the appeals route open to the student in the case of a negative decision, must be communicated in writing by the head of the appropriate academic unit (or delegate) to the student and to the Registrar within seven calendar days of the receipt of the student's complete application. For further information refer to Appeal of Decisions.
6. In those cases where the academic unit accepts the extenuating circumstances the student may be permitted to write a deferred examination or, with the consent of both the academic unit and the student, the grade submitted may be based on term the work completed alone. An interim grade of $A B S$ will be assigned by the academic unit in the case of a student granted a deferred examination. This grade will be replaced by the final grade which must be received by the Registrar within seven calendar days following the start of classes in the next semester or session.
7. A student who is prevented from writing a deferred final examination by illness, bereavement, or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, to have the deferred final examination further deferred. This application should be made via telephone or in writing through the student's University approved e-mail account to the head of the appropriate academic unit (or delegate) and the course instructor. This application should be made in advance of the examination wherever possible, but no later than 48 hours after the original date of the examination. If application is made by telephone, written confirmation must then be received by the head of the appropriate academic unit (or delegate) within seven calendar days of the original date of the examination. The examination will be postponed to a time not later than the last date for examinations in the semester following that in which the student was enrolled in the course. The following supporting documentation is required:

- For illness or medical conditions, medical documentation from a health professional is required. Students should provide the health professional with a copy of the Student Medical Certificate.
- For bereavement or other acceptable cause, official documents or letters that support the reason for the request (e.g. death certificate, letter from employer, etc.) are required.


### 6.8.3 Access to Final Examination Scripts

1. A student has a right to see the final examination script. However, the script is the property of the University and the University retains full possession and control of the script at all times. This regulation upholds the authority and judgement of the examiner in evaluation.
2. To access a final examination script, a student must make a written request to the head of the academic unit in which a course is offered. This request is subject to the following conditions:

- Any such request must be made following release of examination results for the semester or session in which the course was taken and within one month of the official release of grades by the University.
- The final examination script must be viewed in the presence of the course instructor or other person delegated by the head of the academic unit. Both the instructor and the student have the right to be accompanied by a registered student or a member of the faculty or staff of the University.
- The final examination script must not be taken away or tampered with in any way.

3. All final examination scripts shall be retained by the academic unit for a minimum of one academic year.

### 6.8.4 Rereading of Final Examination Scripts

1. A student may apply to have a final examination script reread whether or not the student has obtained a passing grade in that course.
2. A student is encouraged to request to access the final examination script prior to submitting a request to have the final examination reread. For further information refer to Access to Final Examination Scripts.
3. A student who wishes to have a final examination script reread must make application in writing to the Office of the Registrar within one month of the official release of grades by the University. When a rereading is requested, the University will make every reasonable attempt to have the rereading conducted by a faculty member(s) other than the original marker(s). Students are advised to refer to relevant academic units for policies and procedures governing rereads of examinations.
4. An appropriate fee per course must be paid at the time of application. For further information refer to the Financial and Administrative Services website at www.mun.ca/finance/fees/. If the final letter grade in the course is raised after rereading or if the final numeric grade increases by at least $5 \%$, then the fee is refunded. If the final letter grade in the course is unchanged or lowered, and if the final numeric grade increases by less than $5 \%$ or is unchanged or lowered, then the fee is forfeited.

### 6.9 Grading

### 6.9.1 Letter Grades, Numeric Grades and Points Per Credit Hour

The academic standing of each student will be based upon the course(s) for which the student was registered as of seven weeks following the first day of lectures in any semester. The final evaluation submitted to the Registrar shall consist of one of the following letter grades with the appropriate numeric grade and points awarded for each credit hour as follows:

| Letter Grades | Numeric Grades | Points Per Credit Hour |
| :--- | :--- | :--- |
| A | $80-100 \%$ | 4 |
| B | $65-79 \%$ | 3 |
| C | $55-64 \%$ | 2 |
| D | $50-54 \%$ | 1 |
| F | below $50 \%$ | 0 |
| PWD (pass with distinction) - indicates excellent performance | no numeric grade | not applicable |
| PAS (pass) - indicates performance meets expectations | no numeric grade | not applicable |
| FAL (fail) - indicates failing performance | no numeric grade | not applicable |
| DEX (drop) - drop without academic prejudice <br> circumstances) | no numeric grade | not applicable |
| DR (drop) - drop without academic prejudice | no numeric grade | not applicable |
| ABS (absent) - absent for acceptable cause | no numeric grade | not applicable |
| INC (incomplete) -incomplete pending final grade | no numeric grade | not applicable |
| AEG (aegrotat) | no numeric grade | not applicable |
| REX (re-examination) |  |  |

### 6.9.2 Descriptions of Letter Grades

- "A" indicates excellent performance with clear evidence of: comprehensive knowledge of the subject matter and principles treated in the course, a high degree of originality and independence of thought, a superior ability to organize and analyse ideas, and an outstanding ability to communicate.
"B" indicates good performance with evidence of: substantial knowledge of the subject matter, a moderate degree of originality and independence of thought, a good ability to organize and analyse ideas, and an ability to communicate clearly and fluently.
- " C " indicates satisfactory performance with evidence of: an acceptable grasp of the subject matter, some ability to organize and analyse ideas, and an ability to communicate adequately.
- "D" indicates minimally acceptable performance with evidence of: rudimentary knowledge of the subject matter, some evidence that organizational and analytical skills have been developed, but with significant weaknesses in some areas, and a significant weakness in the ability to communicate.
- "F" indicates failing performance with evidence of:
an inadequate knowledge of the subject matter, failure to complete required work,
an inability to organize and analyse ideas, and
an inability to communicate.


### 6.9.3 Good Writing

1. Students at all university levels should have reasonably sophisticated and effective communication skills and are expected to demonstrate proficiency in logical organization, clarity of expression and grammatical correctness. Good writing is expected of students in all courses. Upon graduation students should be capable of expressing complicated ideas clearly and concisely and should be able to develop arguments in a logical manner. When, in the judgement of the instructor, a student persistently fails to display a reasonable standard of writing, the instructor may consider this when assigning a final grade.
2. Good writing is characterized by the following qualities:

- Content
critical insight and freshness of thought,
clear and penetrating ideas,
perceptive, pure grasp of subject,
intelligent use of primary and secondary sources, and
a sense of completeness about the handling of the topic.
- Organization
effective introduction and conclusion,
main idea is clear and logical development follows,
smooth transitions, and
good use of details.
- Style
appropriate, accurate, precise and idiomatic diction, and sentences varied in kind, length and effect.


## - Mechanics

consistently correct spelling,
accurate use of punctuation,
grammatically correct sentences, and
well organized paragraphing.

### 6.9.4 Linked Course

1. A linked course is a course comprising two components and is normally identified by the letter "A" or "B" as the last character of the course number. No credits or points are assigned to the "A" part of a linked course. No credits or points are given until the "B" part is completed. Credits and points will be awarded upon successful completion of the B part and will be attributed to the B part only.

### 6.9.5 Incomplete Grades

1. A student who, for extenuating circumstances, is unable to complete the requirements of a course may, with the approval of the appropriate academic unit, be granted a letter grade of incomplete (INC) in the course. This grade shall be valid for only one week following the start of classes in the next academic semester or session as stated in the University Diary. In the event that a numeric grade has not been received by the Registrar by this deadline the INC shall be changed to the letter grade F with a numeric grade 0\%.
2. A student unable to complete the requirements of a course by the end of one week following the start of classes in the next academic semester or session as stated in the University Diary, may be permitted an extension of time not exceeding the last date for examinations in the semester following that in which the student was enrolled in the course. Such an extension may be granted by the head of the appropriate academic unit at the request of the student. In the event that a numeric grade has not been received by the Registrar by this new deadline the INC shall be changed to the letter grade $F$ with a numeric grade $0 \%$. In special circumstances, students registered for a Social Work Internship may be given an extension not exceeding two semesters. Students registered in one of Human Kinetics and Recreation 2210, 2220, 3210, 3220, 4210 or 4220 may be given an extension not exceeding three semesters, by the Academic Council of the School of Human Kinetics and Recreation.

### 6.9.6 Calculation of Averages

Only courses evaluated using final grades with associated numeric grades and points are included in the calculation of all averages. In calculating current averages the grades obtained in the A part of linked courses shall be included, while the grades obtained in foundation courses and work terms shall be excluded. Credit received as a result of transfer credit and challenge for credit are not included in the calculation. These calculations may be expressed as averages or grade point averages.

1. Current average: is a method of expressing a student's performance for the semester. The current average is based on final grades. The current average is calculated by computing the sum of the numeric grade in each course multiplied by the course weight and dividing that sum by the total of the course weights.
2. Cumulative average: is a method of expressing a student's performance over the student's academic career recorded since the beginning of the 1980-81 academic year. Where any given course, or an equivalent or cross-listed course, is attempted two or more times and is not repeatable, only the best attempt is included in the average. The cumulative average is calculated by computing the sum of the numeric grade in each course multiplied by the credit hour value and dividing that sum by the total number of credit hours attempted.
3. Current grade point average: is a method of expressing a student's performance for the semester. The points associated with each letter grade are multiplied by the course weight. The current grade point average is calculated by dividing the total number of grade points earned by the total of the course weights.
4. Cumulative grade point average: is a method of expressing a student's performance over the student's academic career recorded since the beginning of the 1980-81 academic year. Where any given course, or an equivalent or cross-listed course, is attempted two or more times and is not repeatable, only the best attempt is included in the average. For each course used in the calculation, the points associated with each letter grade are multiplied by the course credit hour value. The cumulative grade point average is calculated by dividing the total number of points earned by the total number of credit hours attempted.

### 6.9.7 Aegrotat Status

1. Students in their final semester or session before graduation, who have been absent from a final examination where one has been scheduled or who have been prevented from completing the semester's or session's work, for reasons which qualify them to write a deferred examination, may, in exceptional circumstances, be given credit for the course on the recommendation of the Senate Committee on Undergraduate Studies.
2. Application for aegrotat status, with full details duly authenticated, must be made to the Registrar, indicating each course for which the application is being made, within one week after the last day of final examinations.

### 6.10 Dean's and Vice-President's List

### 6.10.1 General Information

Memorial University of Newfoundland acknowledges the academic success of its students in various ways. One of these is by naming students to the appropriate dean's or vice-president's list. Annually, every academic unit will name to its list a maximum of $10 \%$ of its students, selected on the basis of academic performance in the nominating period.

### 6.10.2 Procedure and Criteria

1. At the end of the Winter semester, academic units will nominate students to the appropriate list based on academic performance in the three preceding semesters, Spring, Fall, and Winter.
2. Students on the dean's and vice-president's list will be selected based on the following minimum criteria:

- The student must have obtained a grade point average of at least 3.5 in the credit hours completed in the preceding Spring, Fall, and Winter semesters.
- The student must have attended full-time in at least two of the three preceding semesters.
- The student must have successfully completed at least 27 credit hours over the preceding Spring, Fall, and Winter semesters, although an academic unit may require that the 27 credit hours be completed in any two of the three preceding semesters
- In consideration of specific program requirements, individual academic units may include students who have successfully completed, over the three preceding semesters, a course load other than 27 credit hours, but which is consistent with the course load defined by the program.

3. A notation will be placed on the student's transcript indicating that the student has been named to the dean's or vice-president's list.

### 6.11 Continuance and Readmission

These regulations will be applied at the end of each semester to any student who is registered in a course load of at least 9 credit hours on the last day for adding courses in a semester or session, including a student who later drops courses and changes status to that of a part-time student.

### 6.11.1 Eligibility for Continuance

### 6.11.1.1 Academic Criteria for Continuance in the University

At the end of each semester, in order to be eligible for continuance in the University, a student is required either:

- to obtain a current average of $50 \%$ in the courses for which the student is registered on the last day for dropping courses without academic prejudice, or
- to have obtained a cumulative average of at least $55 \%$.


### 6.11.1.2 Academic Criteria for Continuance in Programs of Study

- Most academic units have separate promotion or advancement criteria for continuation of students in specific programs of study. Students are advised to check the regulations of the appropriate academic unit for details. The appropriate committee on undergraduate studies may, at any time, require a student to withdraw for academic reasons.


### 6.11.1.3 Other

- Students who meet the academic criteria for continuance in the University but who have not registered for courses for three or more consecutive semesters are required to apply for readmission to the University in accordance with the Admission/Readmission to the University (Undergraduate) regulations.
- These regulations notwithstanding, the continuance of any student at this University is subject to all University regulations.


### 6.11.2 Academic Warning

1. Any student who, for the first time, fails to meet the requirements outlined under Eligibility for Continuance - Academic Criteria for Continuance in the University will be given an academic warning.
2. Certain conditions may be set for students who have been given an academic warning. Any conditions will be set by the head of the appropriate academic unit and will be administered in conjunction with the Registrar. These conditions may include, but are not limited to the following:

- restrictions on course load,
- enrollment in courses designed to improve academic competence,
- involvement with programs designed to enhance success in university studies, such as those which teach time management, study, or similar skills,
- regular meetings with a faculty advisor.


### 6.11.3 Ineligibility for Readmission

1. Any student who has previously been given an academic warning and who again fails to meet the requirements, as outlined under Eligibility for Continuance - Academic Criteria for Continuance in the University, at this or another recognized university or college, will not be eligible for readmission to the following two semesters.
2. Any student who has previously been given an academic warning and who fails, for the second time, to meet the requirements, as outlined under Eligibility for Continuance - Academic Criteria for Continuance in the University, at this or another recognized university or college, will not be eligible for readmission to the following three semesters. To be considered for readmission after this period, the student will need the recommendation of the head of the appropriate academic unit, or, in the case of a student with an undeclared program of study, a senior faculty advisor.
3. Any student who fails, for the third time, to meet the requirements, as outlined under Eligibility for Continuance - Academic Criteria for Continuance in the University, at this or another recognized university or college, will be considered for readmission only on appeal following a period of withdrawal of at least six semesters. This appeal will be considered by the Senate Committee on Undergraduate Studies only on the recommendation of the head of the appropriate academic unit, or in the case of a student with an undeclared program of study, a senior faculty advisor.
4. In very exceptional circumstances, a student who has been required to withdraw under Eligibility for Continuance - Academic Criteria for Continuance in the University may be permitted to return to the University without serving the full period of dismissal. However, this is possible only once a student has served at least one-half of the required dismissal period. An appeal for readmission will only be considered in the case of health issues, bereavement and/or other acceptable cause, duly authenticated.
Requests shall be submitted to the Office of the Registrar by e-mail to appeals.readmission@mun.ca no later than June 15 for readmission to Fall semester, October 15 for readmission to Winter semester, and February 15 for readmission to Spring semester.
Requests must include the following information:

- name,
- current address and telephone number,
- Memorial University of Newfoundland email address,
- student ID number,
- semester to which student is seeking readmission
- grounds for the request, and
- supporting documentation.

5. Certain conditions may be set for students who are readmitted after a period of ineligibility. These conditions are outlined under Academic Warning.
6. Academic units reserve the right to deny readmission where a student has been determined to have engaged in unprofessional conduct. The code of ethics of the appropriate profession will serve as the guidelines when making this determination. However, should there not be an appropriate code of ethics, the following standard will apply: unprofessional conduct is that conduct which involves a breach of the duties required by professional ethics.
7. The University reserves the right to deny a student readmission where, in the opinion of the Senate committee on Undergraduate Studies, following appropriate professional consultation, there is a reasonable likelihood that the student's health or behaviour could endanger the lives, health, or safety of other persons on-campus or off-campus where such a location pertains to University studies. If the University denies a student readmission, the student must be advised of the nature of the case, must be provided with an opportunity to answer the case, and must be advised of the right to appeal before the penalty imposed takes effect. For information regarding the appeal procedure refer to Appeal of Decisions.
8. These regulations notwithstanding, the readmission of any student at this University is subject to all University regulations.

### 6.12 Academic Misconduct

### 6.12.1 Principles

Within the University community there is a collective responsibility to maintain a high level of scholarly integrity. A student is expected to adhere to those principles which constitute proper academic conduct. Academic misconduct cannot be condoned or even appear to be condoned. A student has the responsibility to know which actions, as described under Academic Offences, could be construed as dishonest or improper. A student is reminded that for further guidance on proper scholarly behaviour the student should seek advice from the student's instructors and faculty advisors.

### 6.12.2 General Information

1. These procedures shall apply to all academic offences relating to undergraduate studies involving, but not limited to, those students who either have been or who are enrolled at Memorial University of Newfoundland. Notification of an allegation of academic misconduct will be forwarded to the last known mailing address of the student as noted on the files at the Office of the Registrar, and/or to the official University email address of the student. The University reserves the right to implement action under these procedures where an allegation has been made against a student but where reasonable efforts to contact the student are unsuccessful.
2. Meetings and interviews stipulated in this regulation will be held in person, or at a distance using telephone or other interactive technologies.
3. A student who wishes to attend classes, laboratories or other educational activities while an investigation under these procedures is being carried out, can do so only with the written permission of the academic unit concerned. Permission to do so will only be granted with the understanding that if the allegation of academic misconduct is proven and the penalty involves either suspension or expulsion, credit will not be granted for work completed prior to a finding of guilt. This provision excludes students charged with an offence under the Code of Student Conduct. For information regarding the Code of Student Conduct contact the Office of Student Life.
Although a student can continue in a program of studies, if eligible, while an investigation under these procedures is being carried out, the University does not accept liability for any consequences to the student's progress. However, the University may take these consequences into account, as appropriate and to the extent feasible, in cases where charges are dropped or the student is not found guilty. The consequences arising from an investigation and any negative decision rendered may include retroactive effects on grades or promotion within a program.
4. A student accused of academic misconduct may consult advisors or facilitators. Such advisors may include a representative from a Memorial University of Newfoundland student union, an international student advisor, a faculty advisor, a University counselor or a faculty member who is familiar with these Regulations and who is willing to undertake the role of advisor whether resolution is sought through Procedures for Resolution of Alleged Academic Offences at the Unit Level or Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies.
5. Where an allegation of academic misconduct relates to research and the Tri-Agency Framework: Responsible Conduct of Research, as amended from time to time, the Framework applies. These procedures shall be applied in a manner consistent with the minimal requirements of the Framework.
6. Where an allegation of academic misconduct relates to research involving United States Public Health Service (USPHS) funds, these procedures shall be applied in a manner consistent with the minimal requirements of the U.S. Office of Research Integrity or other appropriate offices of the U.S. Department of Health and Human Services, including U.S. Federal Regulation 42 CFR Parts 50 and 93, as amended from time to time, and the 'Statement on Dealing with Allegations of Research Misconduct Under USPHS Research-related Activities for Foreign Institutions.'

### 6.12.3 General Procedure

1. When a member of the University community (faculty, staff, student) has grounds for belief that an academic offence has been committed there should be an attempt between the parties concerned to resolve allegations of minor offences. If the alleged offence is not deemed to be minor by the accuser, or resolution proves impossible, or one party is dissatisfied with the resolution, the matter shall be reported, without delay, to the head of the appropriate academic or administrative unit. If resolution is achieved and it is agreed that an academic offence has been committed, then the offence, together with the penalty applied, shall be reported to the head of the academic or administrative unit.
2. Where resolution is not achieved, and if in the judgment of the head of the academic or administrative unit, the alleged offence warrants resolution at the unit level, the individuals involved will be advised to attempt to resolve the matter through Procedures for Resolution of Alleged Academic Offences at the Unit Level. In the event that no resolution is possible through these procedures between the individual parties, the head of the academic or administrative unit will institute proceedings through the Senate Committee on Undergraduate Studies.
3. If, in the judgment of the head of the academic or administrative unit, the alleged offence against University regulations is such as to warrant resolution through the Senate Committee on Undergraduate Studies, the head of the academic or administrative unit will refer the matter to the Secretary of the Senate Committee on Undergraduate Studies, and Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies will be implemented.
4. In all cases, it is the responsibility of the academic or administrative unit to ensure that fairness and impartiality are achieved in the treatment of students.

### 6.12.4 Academic Offences

1. In the following section the plural shall be deemed to include the singular.
2. Academic offences shall be deemed to include, but shall not be limited to, the following:

- Cheating on examinations or any other tests, theses, assignments, work term reports, projects, laboratory assignments, laboratory reports or internship reports: This includes copying from another student's work or allowing another student to copy from one's own work; consulting with any unauthorized person during an examination or test; possessing unauthorized aids; using unauthorized aids; or knowingly recording or reporting false empirical or statistical data. The work referred to includes examinations, theses, assignments, work term reports, projects, laboratory assignments, laboratory reports, internship reports, or any other tests which are to be used in judging the student's performance in a course or program of study, or on any special tests which the University may offer.
- Impersonating another student or allowing oneself to be impersonated: This includes the imitation of a student or the entrance into an arrangement with another person to be impersonated for the purposes of taking examinations or tests or carrying out laboratory or other assignments.
- Plagiarism: Plagiarism is the act of presenting the ideas or works of another as one's own. This applies to all material such as essays, laboratory assignments, laboratory reports, work term reports, design projects, seminar presentations, statistical data, computer programs, research results and theses. The properly acknowledged use of sources is an accepted and important part of scholarship. Use of such material without acknowledgment is contrary to accepted norms of academic behaviour. Information regarding acceptable writing practices is available through the Writing Centre at www.mun.ca/writingcentre.
- Theft of examination papers or other material: This includes obtaining by any improper means examination papers, tests, or any other such material.
- Use and/or distribution of stolen material: This includes the use of material which the student knows to have been improperly obtained and/or the distribution of such material.
- Submitting false information: This includes falsifying academic forms or records, submitting false credentials, medical or other certificates, or making a false, misleading or incomplete declaration to the University.
- Submitting work for one course or work term which has been or is being submitted for another course or work term at this or any other institution without express permission to do so: This includes the presentation of an essay, report or assignment to satisfy some or all of the requirements of a course when that essay, report, or assignment has been previously submitted or is concurrently being submitted for another course without the express permission of the professor(s) involved.
- Prevention or obstruction of access to works or materials provided by the University needed by others for academic purposes.
- Attempt of bribery, and/or threat of blackmail to influence the award of any credit, grade, honour or academic decisions.
- Failure to follow relevant University/Faculty/School guidelines on ethics.
- Failure to follow the Memorial University of Newfoundland Code.


### 6.12.5 Procedures for Resolution of Alleged Academic Offences at the Unit Level

6.12.5.1 Genera/Information

These procedures will not be applied to cases involving alleged offences on final examinations, any other evaluative instruments worth $40 \%$ or more of the final grade, allegations of impersonation or allegations of submission of forged documents. Such alleged offences are governed by the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies.

### 6.12.5.2 Explanation of Procedures

If, upon receiving a report of an alleged academic offence, the head of the academic or administrative unit decides that an attempt should be made to resolve the matter at the unit level the following procedures shall apply:

1. Normally within one week of notification, the head of the appropriate academic or administrative unit shall request a meeting with the accuser and the accused and at the meeting the head shall state the allegation, review the Procedures for Resolution of Alleged

Academic Offences at the Unit Level including the range of applicable penalties, and arrange a second meeting between the accuser and the accused only.
2. At the second meeting the accuser and accused shall endeavour to obtain a mutually satisfactory resolution of the matter.
3. The accuser and accused shall report jointly to the head of the academic or administrative unit on the result of their second meeting.
4. If the report is of a resolution which the head of the academic or administrative unit considers to be fair and equitable the matter shall be considered closed. If the head of the academic or administrative unit considers the reported resolution to be unfair and/or inequitable the head of the academic or administrative unit will endeavour to obtain an alternative satisfactory resolution directly with the parties.
5. Should all reasonable efforts to obtain a resolution at the unit level fail, the head of the academic or administrative unit will refer the case to the Secretary of the Senate Committee on Undergraduate Studies and shall inform the accuser and the accused accordingly. From this stage onward Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies will apply.
6. At any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the student may ask that the student's case be referred to the Secretary of the Senate Committee on Undergraduate Studies, and thereafter the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies will apply.
7. Should the accused be found guilty, a brief description of the offence and the penalty(ies) applied shall be forwarded by the head of the academic or administrative unit to the Office of the Registrar.

### 6.12.5.3 Failure to Appear or Respond

1. If at any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the accused fails to respond to a charge, without reasonable cause, within two weeks of notification of an allegation, action may be taken on the charge in the absence of the accused.
2. If at any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the accuser fails to appear at a scheduled meeting to defend an allegation, without reasonable cause, the action will be dismissed.

### 6.12.5.4 Penalties in the Case of Resolution at the Unit level

A student who has been found guilty of an academic offence will be subject to a penalty or penalties commensurate with the offence. Some cases may warrant more than one penalty for the same offence, and previous academic misconduct will be taken into account in determining the severity of penalties. The range of penalties and their determination are:

1. Resubmission: of work with appropriate reduction in grade: will allow a student to complete and submit the work a second time.
2. Reprimand: will be in the nature of a warning by the head of the academic or administrative unit to the student that the student's behaviour has been unacceptable to the University.
3. Reduction of grade: will apply to an examination, test, or assignment to which an offence is relevant, and will be decided by the head of the academic or administrative unit.

### 6.12.6 Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies

### 6.12.6.1 General Information

If the matter cannot be resolved following the Procedures for Resolution of Alleged Academic Offences at the Unit Level, or if, in the opinion of the head of the academic or administrative unit, the allegation involves a major breach of University regulations, or in cases involving alleged offences on final examinations, evaluative instruments worth $40 \%$ or more of the final grade, allegations of impersonation or allegations of submission of forged documents, the following Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies shall apply. In the application of these procedures, in the case of students attending Grenfell Campus, the Grenfell Campus Sub-Committee of the Senate Committee on Undergraduate Studies shall assume the role and authority defined below for the Senate Committee on Undergraduate Studies. Should there be an instance where the case cannot be heard by the Senate Committee on Undergraduate Studies or the Grenfell Campus Sub-Committee of the Senate Committee on Undergraduate Studies, but is in the first instance heard by the Senate Committee on Academic Appeals, the Senate Committee on Academic Appeals shall assume the role and authority defined below for the Senate Committee on Undergraduate Studies.

### 6.12.6.2 Explanation of Procedures

1. If the head of the academic or administrative unit (in the case of departmentalized faculties, the head in consultation with the dean) is satisfied that the student has a serious allegation to answer, that person shall inform the student in writing or at the official University email address of the student, normally within one week, of the nature of the allegation against the student. In addition, the head of the academic or administrative unit shall report to the Secretary, Senate Committee on Undergraduate Studies, c/o Office of the Registrar, who will, normally within one week appoint as an investigator a member of the Senate Committee on Undergraduate Studies other than Committee members from that Faculty or School, student representatives, and ex-officio members of the Senate Committee on Undergraduate Studies. The investigator will interview separately the accuser, the accused and relevant witnesses. At these interviews the investigator, the accuser, the accused and relevant witnesses all have the right to be accompanied by a registered student or a member of the faculty or staff of the University.
2. Upon completion of these interviews, the investigator shall submit a written report of all findings to the Secretary, Senate Committee on Undergraduate Studies, c/o Office of the Registrar. Normally, the report will be submitted within four weeks of appointment as an investigator.
3. The Secretary of the Senate Committee on Undergraduate Studies shall present this report to both the accuser and accused for perusal and comment. Once in receipt of this report, the accuser and accused shall have two weeks in which to submit to the Secretary, Senate Committee on Undergraduate Studies any additional comments on the report that the person wishes to be considered in the deliberations of the Senate Committee on Undergraduate Studies.
4. The Secretary of the Senate Committee on Undergraduate Studies shall present to the Senate Committee on Undergraduate Studies for decision all information received from the investigator as well as comments from the accuser and accused. The investigator shall attend the meeting held to consider the case to answer questions raised by the Senate Committee on Undergraduate Studies and to provide information pertinent to the case, but shall be absent from the voting process.
5. Once a vote is taken, should the accused be found guilty, the Senate Committee on Undergraduate Studies shall take appropriate action in accordance with Penalties in the Case of Resolution by the Senate Committee on Undergraduate Studies.

### 6.12.6.3 Failure to Appear or Respond

1. If at any stage of the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies, the accused fails to respond to a charge, without reasonable cause, within two weeks of notification of an allegation, action may be taken on the charge in the absence of the accused.
2. If at any stage of the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies, the accuser fails to appear at a scheduled interview to defend an allegation, without reasonable cause, the action will be dismissed.

### 6.12.6.4 Appeals Against Decisions of the Senate Committee on Undergraduate Studies

Appeals against findings of guilt and/or penalties assigned by the Senate Committee on Undergraduate Studies or the Grenfell Campus Sub-Committee can be directed to the Senate Committee on Academic Appeals, c/o The Office of the Registrar in accordance with Appeal of Decisions, The Senate Committee on Academic Appeals.
When considering an appeal against decisions of the Senate Committee on Undergraduate Studies, the Senate Committee on Academic Appeals has the authority to:

- Uphold the decision of the Senate Committee on Undergraduate Studies and, if applicable, the penalty assigned by that Committee.
- Uphold the decision of the Senate Committee on Undergraduate Studies and assign a new penalty, if applicable.
- Reverse the decision of the Senate Committee on Undergraduate Studies and assign a penalty, if applicable.


### 6.12.6.5 Penalties in the Case of Resolution by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals

A student who has been found guilty of an academic offence will be subject to a penalty or penalties commensurate with the offence. Some cases may warrant more than one penalty for the same offence, and previous academic misconduct will be taken into account in determining severity of penalties. Enforcement of penalties resulting from Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies will be overseen by the Registrar. A student who has been found guilty will be issued a Reprimand, which shall be in the nature of a warning to the student that the student's behavior has been unacceptable to the University. Additionally, a student who has been found guilty will be required to successfully complete specific modules of INTG 1000 Academic Integrity and submit a written reflective evaluation as assigned. In addition to the Reprimand and INTG 1000, the range of penalties and their determination is:

1. Resubmission: of work with appropriate reduction in grade; will allow a student to complete and submit the work a second time.
2. Reduction of grade: will apply to an examination, test, or assignment to which an offence is relevant, or to the entire course, and will be decided by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals.
3. Rescinding of scholarships, bursaries or other awards: the recommendation for rescinding of scholarships, bursaries or other awards will be made by the Senate Committee on Undergraduate Studies to the Senate Committee on Scholarships and Awards for a final decision. In the case of a decision by the Senate Committee on Academic Appeals to rescind scholarships, bursaries or other awards, the decision will be forwarded to the Senate Committee on Scholarships and Awards for information. The Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals will notify the student, in writing or by email, of the recommendation or decision.
4. Probation: the period of probation will be determined by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals. The impact of being placed on probation is that the commission of any further academic offence during the period of probation may lead to suspension or expulsion.
5. Suspension: will apply to a course, department, faculty, school, or the University. The period of suspension will be determined by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals and shall not exceed six consecutive semesters.
6. Expulsion: the recommendation for expulsion from the University will be made by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals to the President of the University for a final decision. Prior to the President's decision, the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals will notify the accused, in writing or by email, of the recommendation for expulsion from the University. The accused will be allowed a period of two weeks following the date of release of such notification to lodge an appeal before the President's final decision concerning expulsion from the University. If the penalty, was assigned by the Senate Committee on Undergraduate Studies, any such appeal should be made in writing or by email to the Senate Committee on Academic Appeals, c/o the Office of the Registrar. If the penalty was assigned by the Senate Committee on Academic Appeals any such appeal should be made in writing or by email to the Executive Committee of Senate, c/o the Office of the Registrar.
7. Rescinding of degree: the recommendation for the rescinding of a degree previously awarded by the University will be made by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals to Senate for a final decision. Prior to Senate's decision the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals will notify the accused, in writing, of the recommendation for rescinding of the degree. The accused will be allowed a period of two weeks following the date of release of such notification to lodge an appeal before the Senate's final decision concerning the rescinding of the degree. If the penalty was assigned by the Senate Committee on Undergraduate Studies, any such appeal should be made in writing or by email to the Senate Committee on Academic Appeals, c/o the Office of the Registrar. If the penalty was assigned by the Senate Committee on Academic Appeals, any such appeal should be made in writing to the Executive Committee of Senate, c/o the Office of the Registrar.

### 6.12.7 Transcript Entries Related to Penalties

1. Transcript entries shall relate to the penalty(ies) imposed as follows:

| Penalty | Transcript Entry |
| :--- | :--- |
| Reprimand | No transcript entry |
| Reduction of Grade | Entry of final grade for course |
| Probation | "On probation at the University for academic misconduct until [Day, Month, Year]" |
| Suspension | "Suspended from the University/Faculty/School/Program/Course for academic misconduct until [Day, <br> Month, Year]" |
| Expulsion | "Expelled from the University for academic misconduct effective [Day, Month, Year]" |
| Rescinding of Degree | "Degree rescinded for academic misconduct" |

2. The transcript entries for "probation" or "suspension" will be removed entirely upon the expiration of the penalty.

### 6.12.8 Disposition of Documentation

1. The disposition of documents relating to allegations under these procedures shall be as follows

- In cases where the accused was not found guilty, none of the documentation shall be retained.
- In the case of a resolution effected through Academic Misconduct - General Procedure or Procedures for Resolution of Alleged Academic Offences at the Unit Level, a brief description of the offence and the penalty(ies) applied shall be forwarded by the head of the academic or administrative unit to and retained by the Office of the Registrar, separate from the student files.
- In the case of a resolution effected through the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies, all documentation shall be forwarded to and retained in the Office of the Registrar, separate from the student files.


### 6.13 Graduation

### 6.13.1 Application for Graduation - Degrees, Diplomas and Certificates

Students in their graduating year must apply to the Registrar to be admitted to a degree or to be awarded a diploma or certificate. Application must be made through the Student Web/Self-Service at www.mun.ca/regoff. The deadlines for application are listed in the University Diary for the Spring and Fall convocations.

1. No student can be awarded a degree, diploma or certificate unless and until an average of at least 2 points has been obtained on the total number of credit hours required for such degree, diploma or certificate. The degree of Doctor of Medicine and the degree of Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education are not included in this requirement since all courses comprising each degree are graded on a PAS or FAL basis.
2. It is the duty of the Registrar to certify to the Senate, where appropriate, that students for degrees, diplomas and certificates have met all the regulations and requirements of the University.

### 6.13.2 Classification of General Degrees

1. General degrees are awarded as "Classified", "Unclassified" or are not classified, in compliance with such regulations as may be required by the academic unit(s) offering the program(s). Refer to the degree regulations of the academic units for further information.
2. General degrees are awarded in three classes based on the system for granting points set forth in Grading - Letter Grades, Numeric Grades and Points Per Credit Hour, and determined as follows:

- A student who obtains an average of 3.5 points or better on the total number of credit hours required for the degree shall be awarded the degree with First-Class Standing and provided that all other degree requirements are met.
- A student who fails to obtain First-Class Standing but who obtains an average of 2.75 points or better on the total number of credit hours required for the degree shall be awarded the degree with Second-Class Standing provided that all other degree requirements are met.
- All other students will be awarded the degree with Third-Class Standing, provided that they obtain an average of 2 points or better on the total number of credit hours required for the degree and provided that all other degree requirements are met.

3. When a student obtains credit for more credit hours than are required for the degree, the student's total degree points shall include only those received for the credit hours required. In eliminating from the total points those received for credit hours beyond the requirements of the degree, the credit hour(s) for which the student receives the fewest points shall be disregarded, provided that no credit hour is disregarded that is a requisite for the degree.
4. Where a student receives more than one classified bachelor's degree, the class of each degree will be determined independently by applying the scheme set forth in Classification of General Degrees and provided that in determining the points total for each degree only those credit hours may be counted which are applicable towards the degree concerned.
5. A student who has been granted credit for courses completed at Memorial University of Newfoundland before the introduction of the point system, and/or one who has been given credit for courses completed at another university, will have the class of the degree determined by applying the scheme set forth in Classification of General Degrees in proportion to the total of required credit hours completed at Memorial University of Newfoundland since the introduction of the point system.
6. An Unclassified degree will be awarded to a student who has completed at Memorial University of Newfoundland, fewer than onehalf of the credit hours required for the degree, or fewer than one-half of the required credit hours since the introduction of the point system. All students shall, however, obtain an average of 2 points or better on the total number of the credit hours required for the degree taken at this University since the introduction of the point system.
7. The following degrees are not classified: Bachelor of Education (Intermediate/Secondary), Bachelor of Education (Primary/ Elementary) as a Second Degree Conjoint with Certificate in STEM Education, Bachelor of Engineering, Bachelor of Maritime Studies, Bachelor of Music Education, Bachelor of Post-Secondary Education (as a second degree), Bachelor of Science
(Pharmacy), Bachelor of Special Education, Bachelor of Technology, Doctor of Medicine, Doctor of Pharmacy, and all degrees offered by the School of Human Kinetics and Recreation.

### 6.13.3 Classification of Honours Degrees

1. Honours degrees may be classified or not classified in compliance with such regulations as may be required by the academic unit offering the program. Refer to the appropriate degree regulations of the academic units for further information.
2. A student who has been granted credit for courses completed at Memorial University of Newfoundland before the introduction of the point system, and/or one who has been given credit for courses completed at another university, will have the class of the honours degree determined in proportion to the total number of required credit hours completed at Memorial University of Newfoundland since the introduction of the point system.
3. An honours degree awarded a student who has completed at Memorial University of Newfoundland, fewer than one half of the credit hours required for the degree, or fewer than one half of the required credit hours since the introduction of the point system, may be Unclassified or not classified.

### 6.13.4 Diplomas and Certificates

1. Diplomas and certificates are not classified.

### 6.14 Waiver of Regulations

1. All undergraduate regulations notwithstanding, the University reserves the right, in special circumstances, to modify, alter or waive any regulation in its application to individual students where, in the judgment of the head of the appropriate academic unit or the appropriate committee, merit and equity so warrant. In keeping with the principle that decisions to waive regulations should be made as close as possible to the University officer or committee with responsibility for the regulations, requests for waivers, which normally must be made in writing, must be directed as follows:

- Course Prerequisites or Co-requisites: the head of the academic unit of the course(s) in question.
- Departmental Regulations: the appropriate committee on undergraduate studies upon the recommendation of the head of the appropriate department.
- Faculty or School Regulations: the appropriate committee on undergraduate studies. Such waivers shall not reduce the total number of credit hours required for a minor, major, certificate, diploma, or degree program.
- General Academic Regulations (Undergraduate): the Senate Committee on Undergraduate Studies on the recommendation of the appropriate committee on undergraduate studies. Such waivers shall not reduce the total number of credit hours required for a minor, major, certificate, diploma, or degree program.
- Scholarships, Bursaries, Awards, Medals and Prizes Regulations: the Committee on Undergraduate Scholarships, Bursaries and Awards on the recommendation or request of the head of the appropriate academic unit.

2. Any student whose request for waiver of regulations has been denied has the right to appeal. With the exception of verbal requests for waiver of Course Prerequisites or Co-requisites, the student will be advised in writing of the reasons for the decision and of the avenue of appeal that may be taken. For information regarding the appeal procedure refer to Appeal of Decisions.

### 6.15 Appeal of Decisions

### 6.15.1 General Information

1. Every student has the right to appeal decisions resulting from the application of University regulations.
2. Appeals will be considered in the case of health issues, bereavement and/or other acceptable cause, duly authenticated.
3. For assistance in the appeals process, a student is advised to consult with the Office of the Registrar.
4. In preparing an appeal a student may consult advisors. Such advisors may include a representative from a Memorial University of Newfoundland student union, an international student advisor, a faculty advisor, a counsellor or a faculty member who is familiar with the appeals process and who is willing to undertake the role of student advisor or facilitator.
5. Appeals are made before specific committees that exist at the University to provide an objective review of cases. The appeals process is designed to assist a student at critical points in the student's university career, and to provide an accessible and transparent process for a student. A student should refer also to the Routes of Appeal of Academic Regulations below for information concerning where appeals should be directed.
6. The principles of natural justice shall be applied to the appeals processes and decisions. These principles include, but are not limited to, such practices as all parties to the appeal receiving timely and adequate notice, all parties to the appeal having the opportunity to submit arguments and supporting documentation and all parties to the appeal being made aware of the evidence considered by the committee. No person shâll sit in judgment on an appeal if that person has been previously involved in a decision-making process related to the matter under appeal or if that person has any conflict of interest, bias or reasonable apprehension of bias.
7. While the University makes provision for a student to appeal decisions made under University regulations, the academic, financial or other consequences of the appeals process rests with the student.
8. When an appeal is denied, the student shall be advised in writing of the reasons for the decision and if there are further steps that can be taken in the appeals process.
9. A student whose appeal is denied by the Senate Committee on Undergraduate Studies may appeal to the Senate Committee on Academic Appeals. Academic units whose decisions are overturned by the Senate Committee on Undergraduate Studies may appeal to the Senate Committee on Academic Appeals. Decisions of the Senate Committee on Academic Appeals are final and within the University there is no further appeal.
10. Unless the student bringing the appeal requests otherwise, student appeals are heard anonymously by all committees except the Senate Committee on Academic Appeals.

### 6.15.2 Routes of Appeal of Academic Regulations

1. Normally, the responsibility for making an appeal before the appropriate committee of the University rests with the student.
2. A student who is ineligible to register for courses officially but who wishes to attend classes, laboratories or other educational activities while an appeal is in progress can do so only with the written permission of the academic units offering the courses. Such permission shall not be unreasonably withheld.
3. A student whose request for waiver of regulations has been denied may direct the appeal as described below.

- Course prerequisites or co-requisites: to the appropriate faculty/school committee on undergraduate studies. No further appeal is possible;
- Applications to write Deferred Final Examinations: to the appropriate faculty/school committee on undergraduate studies;
- Program Regulations: to the Senate Committee on Undergraduate Studies, c/o The Office of the Registrar, where the appropriate committee on undergraduate studies denies the request for waiver;
- General Academic Regulations (Undergraduate): to the Senate Committee on Academic Appeals, c/o The Office of the Registrar;
- Decisions of the Senate Committee on Undergraduate Studies: to the Senate Committee on Academic Appeals, c/o The Office of the Registrar;
- Scholarships, Bursaries, Awards, Medals and Prizes Regulations: to the Senate Committee on Academic Appeals, c/o The Office of the Registrar; and
- Decisions of a Faculty/School under Regulations for Readmission and Advancement, 7. of the Faculty of Education; Promotion Regulations, Other Information, bullet four of the School of Human Kinetics and Recreation; Regulations for the Degree of Doctor of Medicine, Promotion, 6. of the Faculty of Medicine; Promotion Regulations, 10. of the Faculty of Nursing; Promotion Regulations, Other Information of the School of Pharmacy; or Academic Requirements and Promotion Regulations, Promotion Status, Other Information, 1., bullet three of the School of Social Work: to the Senate Committee on Academic Appeals, c/o The Office of the Registrar.


### 6.15.3 Route for Questioning Grades

1. Grades awarded in individual courses cannot be appealed, as the student shall normally have had the opportunity to contest grades immediately after the release of examination results (see Access to Final Examination Scripts and Rereading of Final Examination Scripts). Dissatisfaction with grades is not sufficient grounds for an appeal.
2. Notwithstanding the above, and recognizing that the awarding of grades is an academic matter within the purview of experts in a discipline or subject area, a student who wishes to question the grades awarded in individual courses may consult with the following in the order given:

- the course instructor
- the head of the appropriate academic unit
- the Dean of the appropriate Faculty/School or Vice-President of the Marine Institute


### 6.15.4 Information Required in Letters of Appeal

1. Except in the case of appeals to the Senate Committee on Academic Appeals, appeals must be made in writing, clearly stating the basis for the appeal, and must be directed to the secretary of the appropriate University committee.
2. In the letter of appeal, the student must clearly and fully provide:

- name,
- current address and telephone number,
- Memorial University of Newfoundland e-mail address,
- student ID number,
- the decision being appealed,
- the grounds of appeal, and
- the resolution being sought.


3. When providing grounds for the appeal, including health issues, bereavement and/or other acceptable cause, a student must present independent evidence to corroborate statements made in the letter of appeal. Preferably, this evidence will come from a professional, such as a health professional, a counsellor, or a professor. However, certificates from other knowledgeable parties may be acceptable.
4. A student shall include with the letter of appeal any submissions the student wishes to make in support of the appeal.
5. In cases where an appeal is based on health issues, the student must produce an original certificate from a health professional in the form of a note or letter. Such a certificate must be sufficiently specific to allow appropriate consideration of the student's case. The certificate must also clearly state that, in the opinion of the health professional, the problem was serious enough to have interfered with the student's work. A student should refer to the section below, Information Required in Certificates from Health Professionals, for more complete information.
6. A student claiming bereavement as grounds must provide an obituary notice or death certificate, together with evidence of a close personal relationship between the student and the deceased.
7. Privacy and Confidentiality: The committees to which appeals are made do require substantial information about the reasons for the appeals in order to make their decisions. However, the committees also recognize each student's right to privacy and its obligations, under the Access to Information and Protection of Privacy Act, to safeguard a student's personal information.

### 6.15.5 The Senate Committee on Academic Appeals

Appeals shall be initiated by submitting a written Notice of Appeal, c/o The Office of the Registrar, containing the following: When the Notice of Appeal is from a student:

- name,
- current address and telephone number,
- Memorial University of Newfoundland e-mail address,
- student ID number,
- a copy of the decision giving rise to the appeal,
- supporting documentation,
- a description of the matter under appeal,
- the grounds of appeal, and
- the resolution being sought.

When the Notice of Appeal is from an academic unit:

- name of the Head of the academic unit,
- Memorial University of Newfoundland e-mail address,
- a copy of the decision giving rise to the appeal,
- supporting documentation,
- a description of the matter under appeal,
- the grounds of appeal, and
- the resolution being sought.

2. The Notice of Appeal should include, in writing, relevant information in support of the appeal.
3. Except with the approval of the Executive Committee of Senate, notices of appeal shall be submitted no later than the last day of classes in the semester following the semester in which the decision under appeal was sent to the student.
4. In accordance with the principles of natural justice, students and academic units are entitled to make an oral presentation.
5. Appeals shall be heard either through written submission only or through an oral presentation, as requested. No inferences shall be drawn from the choice.
6. When an appeal is heard by an oral presentation, a student may be accompanied by an advisor (see Appeal of Decisions, General Information, 4.). A student may participate in person, or at the expense of the University, by way of teleconference, or by such other means approved in advance by the Committee; however, any expenses incurred by the student are the responsibility of the student.
7. Decisions of the Senate Committee on Academic Appeals are final and within the University there is no further appeal.

### 6.15.6 Information Required in Certificates from Health Professionals

1. A student who requests permission to drop courses; to withdraw from University studies; to have examinations deferred or to obtain other waivers of University, departmental or course regulations based on health issues is required by the University to provide, in support of the request, a certificate from a health professional in the form of a note or letter. Such certificates must be sufficiently specific to allow a proper consideration of a student's case. The University requires that all such certificates must be on letterhead, must be signed by the health professional, must confirm the specific dates on which the student visited the health professional and should include details on the following:

- the degree to which the health issue (or treatment, in the case of medication, for example) is likely to have affected the student's ability to study, attend classes, or sit examinations;
- the length of time over which the student's abilities were likely hampered by the condition (e.g., recurring and severe back pain over a two-month period would likely have a more adverse effect on studies than a single episode of back pain requiring bed rest for a week);
- the fitness of the student to resume studies (it is in the student's best interest not to return to studies prematurely).

2. The University respects the privacy of students and will keep confidential all such certificates. A student should request that the health professional retain a copy of such a certificate in case the certificate needs to be verified or reissued at a later date.

## 7 Certificate Programs

Certificate courses are specially designed courses relating to specific areas of study for which no equivalent degree credit course exists and are not applicable towards an existing diploma or degree program.
A student is required to meet UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate) for entry to Memorial University of Newfoundland.
A student may receive up to three exemptions for equivalent course work completed through another program or at another institution. If a student has previously obtained credit from Memorial University of Newfoundland for any of the courses on a certificate program, the student will not be required to repeat these courses. To receive exemptions for certificate credit courses, a student must make a written request with supporting documents (transcripts and course descriptions).

### 7.1 Admission Requirements

A student who wishes to complete certificate programs must be admitted to the University as an undergraduate student and comply with the General Academic Regulations (Undergraduate).

### 7.2 Regulations for a First Certificate

A Memorial University of Newfoundland certificate is awarded to a student who completes certificate program requirements.

1. Every candidate for a certificate shall comply with all the course requirements governing the award of that certificate.
2. Candidates shall complete at this University a minimum of 9 credit hours of the total number of credit hours required for a certificate.

No candidate will be awarded a certificate unless an average of 2 points or better on the total number of credit hours required for the certificate has been obtained.

### 7.3 Regulations for a Second Certificate

A student who has completed a certificate program and wishes to complete a second certificate must:

1. comply with all course requirements governing the award of that certificate; and
2. complete at least 9 credit hours beyond those required for the first certificate. The courses which comprise these credit hours must be applicable to the certificate sought.

## 8 Scholarships, Bursaries and Awards

www.mun.ca/scholarships/home
A complete list of scholarships, bursaries and awards is available at www.mun.ca/scholarships/scholarships.
Various types of awards are available to students of Memorial University of Newfoundland. Included are scholarships, bursaries, fellowships, studentships, prizes, medals and loans.
A scholarship is based on academic performance and is awarded to the student with the highest average meeting the conditions of the scholarship. Scholarship standing is required for all scholarships.
A bursary is based primarily on financial need and may be awarded to full-time students who have a minimum GPA of 2 (out of a possible 4) and meet the other conditions of the bursary.
An award is offered to recognize special achievements or to assist with special projects or travel. Awards may be given to students with a minimum of clear standing as defined by the University and outlined under UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Continuance and Readmission, Eligibility for Continuance, and meeting the other conditions of the award.
A grant is an award for which need is a prime consideration, normally with the provision that the recipient be, or remain, in good academic standing.
Loans are granted to students on an "ad hoc" basis with need being the prime consideration. Loans are normally repaid before the commencement of subsequent semester. Interest is charged on outstanding loans.
Some scholarships and awards may be held for more than one year, but are usually renewable only if the student maintains scholarship standing and first class standing.
Entrance scholarships are awarded for the Fall semester. Revised High School transcripts will only be considered for entrance scholarships up to the last day of September of the student's entering year.
Unless otherwise noted, entrance scholarships are open to Canadian citizens and permanent residents graduating from secondary school who are admitted to Memorial University of Newfoundland on the basis of high school grades and current entrance standards and who meet the current definition of scholarship standing. They are also open to students in the above category who may not be coming directly from high school. This is limited to those who have previously graduated from high school, are admitted to the University on the basis of high school grades and current entrance standards and who meet the current definition of scholarship standing.
Distinct undergraduate entrance scholarships are available for international students. These scholarships are awarded to international undergraduate students who are entering Memorial University of Newfoundland. They are academic based, and the monetary value is between $\$ 3000$ and $\$ 4400$. Students do not need to apply for these scholarships; they are automatically considered when they apply to the University. These scholarships have been established by Memorial University of Newfoundland as part of an agreement by the Board of Regents, in May 2003, that a portion of the tuition fees for international undergraduate students would be set aside for International Scholarships. To be considered for these scholarships, a student must be eligible to pay the full international undergraduate fee, must register for at least 9 credit hours in each of two semesters in their first academic year at Memorial University of Newfoundland, should normally have fewer than 31 credit hours of transfer credits and meet scholarship standing (comparable to that prescribed for Newfoundland and Labrador and Canadian applicants), These scholarships will be awarded by the Senate Committee on Undergraduate Scholarships, Bursaries and Awards on the basis of a recommendation from the Director, Office of Student Recruitment.
International Students are eligible for continuing undergraduate scholarships offered through Memorial University of Newfoundland assuming they meet the specific criteria. Most scholarships require students to be in scholarship standing. See definition of scholarship standing below.
Scholarship standing for undergraduate entrance, students (who are Canadian citizens or permanent residents graduating from secondary schools within Canada) is defined as a $75 \%$ average compiled from the final grades received in secondary school courses required for University admission. Students in level three who, have a $90 \%$ or higher average on 3000 level credits from the list of courses covered under UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate), Applicants Who Have Followed the High School Curriculum of the Newfoundland and Labrador, may be provisionally offered scholarships. Students graduating from High Schools in other provinces in Canada may be eligible based on corresponding criteria from their provincial secondary program. The provisional offer will remain in effect until University admission averages are determined.
Scholarship standing for undergraduate students is defined as a $75 \%$ average at the end of two out of the last three semesters in the previous scholarship year and the successful completion of not less than 30 credit hours in those two semesters. In considering students who complete more than 30 credit hours in those two semesters, the average on the actual number of credit hours taken will be reviewed. Students who fail one or more courses during the scholarship year, regardless of the number of courses completed, will not be eligible for scholarships.
For Co-op students who do not meet the above definition because of scheduled work terms, scholarship standing is defined as a $75 \%$ average over the most recent two academic semesters in the preceding four semesters in which they must have been enrolled as regular full-time Co-op students. Those who fail an academic course or work term during the four semester period will not be eligible for scholarships.
First class standing is defined as having a 3.5 out of 4.0 GPA at the end of the two semesters being considered for scholarship standing. Not all students who meet the above definitions of scholarship standing will receive a scholarship.
Students transferring to Memorial University of Newfoundland from Universities/Colleges in Canada which are members of Universities Canada and who meet scholarship standing as defined by Memorial University of Newfoundland will be eligible for undergraduate scholarships in the year in which they transfer. Such students must notify the Scholarships, Bursaries and Awards Office in writing of theí intention to transfer and provide a complete transcript for the year in question.
Awards must be taken during the scholarship year for which they are awarded and the student must be registered full-time or in a recognized work term in order to receive their scholarship, unless stated otherwise in the terms of reference. The scholarship year runs from May 1st -April 30th.
A student may receive in any one scholarship year, one general scholarship/bursary/award (i.e. not based on a recommendation from an academic unit) administered by the Senate Committee on Undergraduate Scholarships, Bursaries and Awards. Students who have received a general scholarship/bursary/award, may receive additional academic unit scholarship(s)/bursary(s)/award(s) (i.e. those based on a recommendation of the appropriate academic unit) administered by the Senate Committee on Undergraduate Scholarships, Bursaries and Awards. In the latter case academic units are encouraged, wherever possible, to maximize the number of students who will benefit from the scholarship program.
Students who have obtained scholarship standing as defined above need not apply for general scholarships. Inquiries from students with special circumstances and/or concerning scholarships with special terms should be referred to the Scholarships, Bursaries and Awards Office, University Centre, Room 4018, or by telephone to (709) 864-3956.

Students attending the Grenfell Campus in Corner Brook are eligible for all General Scholarships. Scholarship inquiries may be made at the Student Affairs Office, Grenfell Campus or the Scholarships, Bursaries and Awards Office.
Students wishing to apply for awards administered by other authorities should consult the appropriate section of the Scholarships, Bursaries and Awards portion of the Calendar and/or the Scholarships, Bursaries and Awards Office.
Information on these and other post-secondary scholarships, awards, and bursaries is available at www.mun.ca/scholarships.
In addition to undergraduate awards listed herein, limited information is included concerning Studentships, Fellowships and Graduate Awards. Further inquiries may be made to the Scholarship Committee, though students are advised to consult the Heads of the Departments, the Dean of the Faculty or the Dean of Graduate Studies concerning these particular awards.

### 8.1 Government Assistance

The Government of Canada and the Government of Newfoundland and Labrador work together to provide student financial assistance to residents of the Province. Students who have a demonstrated financial need may, upon application, receive financial support from the Canada-Newfoundland and Labrador Student Financial Assistance Program. Students are encouraged to apply online at www.aesl.gov.nl.ca/studentaid/ and to apply early.

## 9 Non-Academic Regulations

### 9.1 Discipline

The President may use all means deemed necessary for maintaining discipline. Students found guilty of misbehaviour may be suspended or fined on the authority of the President, or expelled from the University by the President on the authority of the Board of Regents. (See the Code of Student Conduct)

### 9.1.1 Traffic and Parking Regulations On Campus

Students, employees, service personnel, and other persons having a direct association with the University, Health Sciences Centre, or the Fisheries and Marine Institute wishing to park a vehicle in a designated area on campus must obtain a parking permit. Traffic and parking regulations on campus are enforced by Campus Enforcement and Patrol assisted by the Royal Newfoundland Constabulary.
Application forms for vehicle parking permits, copies of the Traffic and Parking Rules and Regulations, and other information pertaining to traffic and parking on campus, are available at the Campus Enforcement and Patrol Office, Facilities Management Building, Room FM1018, or the Health Sciences Centre, Room H2720, or the Fisheries and Marine Institute, Room C2210. Additional Information regarding the Traffic and Parking Rules and Regulations is also available at www.mun.ca/cep/parking.

### 9.2 Firearms on Campus

Memorial University of Newfoundland prohibits firearms in classrooms on its campuses.


FACULTY OF BUSINESS ADMINISTRATION


## FACULTY OF BUSINESS ADMINISTRATION

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Dean
Dostaler, I., B.B.A., M.Sc. HEC Montréal, Ph.D. Cambridge; Professor
Up-to-date personnel listings are available at www.business.mun.ca/our-people.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Faculty Description

The Faculty of Business Administration is known for innovative, high-quality academic programs, basic and applied research, and responsive community outreach activities, including those provided by the Gardiner Centre. The faculty prepares students to succeed in a competitive work place. Each business program is designed to give students the skills and experience needed to advance their careers. The faculty's close-knit community provides students with many opportunities to get involved and network with fellow classmates.
Additional information regarding the Faculty of Business Administration is available at www.business.mun.ca.
Information regarding the Gardiner Centre is available at www.busi.mun.ca/gardinercentre.
Students must meet all regulations of the Faculty in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Faculty History

In 1954, the University approved a bachelor of commerce undergraduate degree. Over the next two decades, the Department grew substantially in the size of its student enrolment and program offerings. In 1973, it was renamed the School of Business Administration and Commerce, and the University established the first co-operative undergraduate business program in Canada. In 1981 the School was granted faculty status, reflecting the growth and diversity of its academic programs.
In 2002, the Faculty of Business Administration became the first in Atlantic Canada to be accredited by AACSB International-the Association to Advance Collegiate Schools of Business. AACSB International is one of higher education's most prestigious and rigorous accrediting bodies, stressing academic excellence and dedication to continuous improvement. This accreditation is the highest distinction offered to business schools both nationally and internationally.

### 3.2 Academic and Professional Ethics

The Faculty of Business Administration expects its students to adhere to the highest standards of academic and professional integrity. The Faculty has created a Statement and Code of Academic and Professional Integrity, which is posted prominently in the Faculty of Business Administration Building and is distributed annually to all students in the Faculty. The Statement and Code of Academic and Professional Integrity provides guidance and prescriptive standards.
Academic integrity allows students to express their own thoughts, opinions, and values while pursuing academic excellence and striving to achieve their own personal best. It means that they will take responsibility for their learning values, and pursue academic goals with honesty and enthusiasm. Academic integrity refers to submitting/presenting work for credit that represents only the student's/students' own work unless otherwise properly acknowledged, documented, and previously authorized by the instructor. This work includes, but is not limited to, exams, assignments, quizzes, individual or group projects or assignments, oral presentations, and work term reports.
Professional integrity requires students to act with honesty, demonstrate accountability, engage in respectful collaboration, and support a culture of inclusiveness and respect. When students are participating in University activities, they shall do so with professional integrity and shall consistently apply the knowledge, skills, and values expressed in the Student Code of Conduct.
UNIVERSITY REGULATIONS, Academic Misconduct - Academic Offenses outlines Academic Offenses. The following are examples of offenses that contravene the Faculty of Business Administration's guidelines on ethics (Statement and Code of Academic and Professional Integrity) and will be resolved in accordance with UNIVERSITY REGULATIONS, Academic Misconduct

- including a student's name or allowing one's own name to be included on the list of contributors to a group project without having contributed to that work;
- altering a piece of work after it has been graded and submitting it for re-grading;
- taking another's examinations, assignments, or solutions to examinations or assignments without the owner's permission; and
- using or divulging confidential information obtained during research or while on Work Terms and/or making use of inappropriately divulged confidential information.
Students in the Faculty of Business Administration are subject to the Student Code of Conduct in all Faculty- or University-related activities including: work terms, exchanges, and case and other competitions. Violations of this standard of professional integrity will be resolved in accordance with the Student Code of Conduct.


### 3.3 Vision Statement

Our Vision is to enhance our reputation as a leading business school with an international presence and national and provincial relevance.

### 3.4 Mission Statement

Our Mission is to prepare our students for global success, to engage in scholarship with global reach and local relevance, and to serve as a catalyst for the success of organizations and individuals. In this way we fulfill our special obligation to the people of Newfoundland and Labrador.

1. We provide comprehensive business education that combines theory and practice, inspiring students to become successful and valued members of their professions and communities.
2. We conduct and disseminate high quality basic and applied research that informs understanding of the core disciplines of business and management and enhances organizational practice.
3. We engage with our community to share expertise, advance and apply business knowledge, and develop and deliver best practices.

## 4 Description of Programs

Students must meet all regulations of the Faculty of Business Administration in addition to those stated in the general regulations. For information concerning fees and charges, admission/readmission to the University, and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
All courses of the Faculty are designated by BUSI.

### 4.1 Undergraduate Programs

The following undergraduate programs are available:

1. Minor in Business Administration: is comprised of eight business courses ( 24 credit hours) and is available to students who are completing non-Business degree programs which provide for the completion of a minor.
2. Minor in International Business: is comprised of eight business courses ( 24 credit hours) and is available to students who are completing non-Business degree programs which provide for the completion of a minor.
3. Certificate in Business Administration: is comprised of 10 courses ( 30 credit hours) and is designed to meet the needs of individuals who hold full- or part-time employment and wish to complement their work experience with preparation for future business education. This Program may be completed in-class, via distance education, or a combination of both.
4. Diploma in Business Administration: is a 20-course ( 60 credit hour) Program designed to meet the needs of individuals who hold full- or part-time employment and wish to complement their work experience with theoretical business education. This Program may be completed in-class, via distance education, or a combination of both.
5. Bachelor of Commerce (Co-operative): is a full-time, 45-course ( 135 credit hour) Program with a structured format. This five-year degree includes three four-month work terms. Students have the opportunity to concentrate in accounting, finance, human resource and labour relations, information systems, international business, marketing, operational research, resource-based industries management, small business/entrepreneurship, or supply chain management.
6. Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts: is comprised of 50-courses (150 credit hours). Students in the Bachelor of Commerce (Co-operative) Program may simultaneously complete the requirements for a Bachelor of Arts program. Some degree requirements are modified for students pursuing joint degrees.
7. Bachelor of Commerce (Co-operative) (Honours): signifies superior academic achievement.
8. Bachelor of Business Administration (B.B.A.): is a 40 -course ( 120 credit hour) general business program with a flexible course structure. This four-year degree may be completed in-class, via distance education, or a combination of both. It can be completed full- or part-time.
9. Joint Degrees of Bachelor of Business Administration and Bachelor of Music: is a five-year, 160 credit hour program offered jointly with the School of Music and is recommended for individuals planning to pursue a variety of careers in the music, creative and cultural industries from entrepreneurial ventures (e.g. performance, composition, studio teaching, digital media) to professional and managerial work within established businesses and organizations.
10. Bachelor of Business Administration (Honours): signifies superior academic achievement.
11. International Bachelor of Business Administration (i.B.B.A.): is comprised of 40 courses ( 120 credit hours) and is designed to produce business professionals with a global perspective. This four year degree program differs from traditional business programs in its requirements that graduates must complement the usual set of business skills with an understanding of the international environment, cross-cultural skills, and experience relevant to a particular global region (e.g., Asia, Europe or Latin America).
12. International Bachelor of Business Administration (i.B.B.A.) (Honours): signifies superior academic achievement.

Upon meeting the qualifications for any of the above-noted programs students must apply to graduate on the prescribed "Application for
Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin.
Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

### 4.1.1 Business Co-operative Education

General management of the work terms in the Co-operative Program is the responsibility of Business Co-operative Education. Through its co-ordinators, it is responsible for assisting potential employers to become involved in the program, for the continual development of employment opportunities, for arranging student-employer interviews, for counselling of students, for visiting students on their work assignments and for the evaluation of the work term.
Students and employers choose each other through the job competition process. Job advertisements are posted and students may apply for up to twelve positions. Employers interview students, and both the students and employers express their preferences for one another.
Students are then placed by Business Co-operative Education to reflect expressed preferences. Placement is not guaranteed but every effort is made to ensure that appropriate employment is made available. In the case of students who are required to withdraw from the program, Business Co-operative Education has no responsibility for placement until they have been readmitted to the program.
Salaries paid to co-operative students are determined by employers based upon their internal wage structures, and tend to increase as the student progresses through the program and assumes more responsibility. However, students should not expect the income from
work terms to make them completely self-supporting.
Students in the Co-operative Program give permission to prospective employers, in the course of the placement process, to have access to their records, which contain their academic marks and their work term evaluations. After accepting a position, students may not withdraw from a specific job situation unless prior permission is obtained from the Committee on Undergraduate Studies.

### 4.2 Graduate Programs

Programs leading to the Master of Business Administration (M.B.A.), the Master of Employment Relations (MER), and the Ph.D.(Management) degrees are described in the School of Graduate Studies section of the University Calendar.

## 5 Program Regulations

1. The Office of the Registrar and the Faculty of Business Administration will assist students with any questions or problems which might arise concerning the interpretation of academic regulations. It is, however, the responsibility of students to see that their academic programs meet the University's regulations in all respects.
2. No student shall obtain more than one undergraduate degree from the Faculty of Business Administration.
3. The Faculty of Business Administration may recommend that transfer credit for certain Business courses be awarded on the basis of successful completion of professional courses that lead to a professional designation (e.g. C.A., C.G.A., C.M.A.). Applications for transfer credit should be made through the Office of the Registrar.
4. The Faculty of Business Administration may approve that credit for certain Business courses successfully completed through Memorial University of Newfoundland's former Extension Services Division be granted upon application to the Registrar for transfer credit evaluation.

### 5.1 Regulations for Business Minors

1. Students who are completing a non-Business degree program which provides for the completion of a minor may complete a minor in either Business Administration or International Business.
2. Students who wish to undertake either Business minor program must have completed a minimum of 30 credit hours. Application is made in the space provided on the Declaration/Change of Academic Program Form which must then be approved by the Dean of the Faculty of Business Administration or delegate. The form may be obtained in person at the Office of the Registrar or at www.mun.ca/regoff/registration/Declare_Change_Academic_Program.pdf. Admission into the minor program is selective: at the time of application a student must have a cumulative average of at least $65 \%$.
3. A Minor in Business Administration shall consist of 24 credit hours comprising the following courses: BUSI 1000, 1101, 1210, 3310, 4000, 4500, and two courses chosen from BUSI 1600, 2101, 2210, 3700, 4320 and 4330.
4. A Minor in International Business is offered as a special program of an interdisciplinary nature, consisting of 24 credit hours as follows:
a. BUSI 1101, 1210, 3310, 5302, Political Science 2200; and
b. Three further courses from 6040, 6311, 6330, 7005, 6550, 7240, a pre-requisite for one of the preceding courses and/or from cognate courses such as Economics 3030, 4030, Political Science 3210, and 3250, to be chosen through prior consultation with the Coordinator of the International Business program.
5. Course prerequisites for all courses shall apply to both Business minors. Students should note, for example, that the prerequisites for BUSI 4500 are BUSI 1101, Statistics 2500 and Economics 1010 (or the former 2010), and that the prerequisites for BUSI 5302 are BUSI 1000, Economics 1010 (or the former 2010), Economics 1020 (or the former 2020). It should be noted that some courses are not offered every semester.

### 5.2 Regulations for General Degree of Bachelor of Commerce (Co-operative)

The application for admission or readmission to programs offered by the Faculty of Business Administration is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

### 5.2.1 Admission Modes and Requirements

### 5.2.1.1 Direct Entry (for High School Students)

Students may apply for admission into first year of the Bachelor of Commerce (Co-operative) program (Terms A/B) directly from high school. Applicants should follow the application instructions at www.mun.ca/undergrad/apply. Terms A/B normally starts in September. Direct entry from high school is subject to the applicant's final acceptance to the University and admissibility into Mathematics 1000, 1090 or 109A/B.

### 5.2.1.2 Advanced Standing (for Current Memorial University of Newfoundland Students)

1. Students may apply for admission with Advanced Standing into academic terms beyond Terms A/B up to and including Term 4. Students applying for admission to a term beyond Terms $A / B$ must have completed all of the academic courses required in the program up to that term, including the academic courses required in Terms $A / B$, with grades at least as high as those required to meet promotion requirements. Students applying for admission with advanced standing must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin, normally on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program.
2. Students admitted with advanced standing into Term 4 must complete Business 300W during Term 4, Work Term 1 following Term 4, Work Term 2 following Term 5, and Work Term 3 following Term 7.
3. Admission with Advanced Standing is competitive and selective. Prospective students are therefore encouraged to consider an alternate degree program in the event that they are not accepted into the Bachelor of Commerce (Co-operative) program.
4. The primary criterion used in reaching decisions on applications for admission with advanced standing is overall academic achievement. Since the Bachelor of Commerce (Co-operative) program is full-time and continuous, the Admissions Committee will review the applicant's transcript for evidence that the applicant has the ability to complete 15 -credit hour course loads and achieve grades at least as high as those required to meet promotion requirements on those course loads. Applicants whose transcripts do not demonstrate this ability or whose overall academic records are weak are unlikely to be admitted.

### 5.2.1.3 Transfers From Other Post-Secondary Institutions

Students who are transferring from other universities must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. Subject to items 2. and 3. under Advanced Standing (for Current Memorial University of Newfoundland Students) above, transfer students from other universities will be placed in that Term of the program judged by the Admissions Committee of the Faculty to be appropriate considering equivalent credits. Regardless of the Term into which they are admitted, transfer students must complete a minimum of two work terms.

### 5.2.2 The Curriculum

1. To graduate with the Bachelor of Commerce (Co-operative) degree, every student shall successfully complete 135 credit hours over nine academic terms in the Co-operative Program and shall normally be required to successfully complete three work terms. The 135 academic credit hours are distributed as follows: 30 credit hours over the course of Terms A/B and 15 credit hours in each of Terms 1 through 7.
2. Students who have been admitted to the Bachelor of Commerce (Co-operative) program must complete courses in academic terms or "blocks" in the sequence, order and course load as set out in the Table 1 Bachelor of Commerce (Co-operative) Curriculum. Exceptions to this prescribed program, including specified course load, must have the approval of the Admissions Committee or of the Committee on Undergraduate Studies of the Faculty.
3. By the end of the Winter semester of their first year, Terms $A / B$ students must have successfully completed the following 30 credit hours:
a. Six credit hours in English courses which must include English 1110 or 1021;
b. Mathematics 1000;
c. Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020);
d. BUSI 1000;
e. Twelve additional credit hours in non-Business electives. Students who wish to complete the Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts [see entry immediately following The Curriculum below] are strongly advised to include courses in a second language and courses in the subject of the intended Major program.
4. The curriculum of courses and work terms beyond the 30 credit hours required in Terms $A / B$ is as follows:
a. Statistics 2500 ;
b. Fifty-four credit hours in core Business Administration courses: 1101, 1210, 1600, 2010, 2101, 2210, 2400, 2710, 3310, 3401, 3700, 4000, 4050, 4320, 4330, 4500, 5301, and 7000
c. At least 21 credit hours but no more than 36 credit hours in Business êlectives which must be chosen from Table 4 Business Electives;
d. At least 12 credit hours but no more than 27 credit hours in non-Business electives;
e. Three work terms of four months duration each.

Unspecified credits may not be used to fulfil the requirements outlined in a., b., and e. above.
5. Notwithstanding clauses 2. and 4. and bullet three of UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Classification of Students, students do not require special permission to register for courses while on work terms if the courses are in addition to the prescribed program.

Table 1 Bachelor of Commerce (Co-operative) Curriculum

| Fall and Winter, Terms A/B | 6 credit hours in English courses which mustinclude English 1110 or 1021 <br> Mathematics 1000 <br> Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020) <br> BUSI 1000 <br> 12 additional credit hours in non-BUSI electives |
| :--- | :--- |
| Fall, Academic Term 1 | BUSI 1101, 1210 <br> Statistics 2500 <br> 6 credit hours chosen from: BUSI 1600, 2010, 2400, 2710, and 3 credit hours of electives* |
| Winter, Academic Term 2 | BUSI 2101, 2210 <br> Remaining 9 credit hours from: BUSI 1600, 2010, 2400, 2710, and 3 credit hours of electives* |
| Fall, Academic Term 3 | BUSI 300W, 3310, 3401, 3700 <br> 6 credit hours in elective courses* |
| Winter, Work Term 1 | BUSI 399W |
| Spring, Academic Term 4 | BUSI 4000, 4050, 4320, 4330, 4500 |
| Fall, Work Term 2 | BUSI 499W |
| Winter, Academic Term 5 | BUSI 5301 <br> 12 credit hours in elective courses* |
| Spring, Work Term 3 | BUSI 599W |
| Fall, Academic Term 6 | BUSI 7000 <br> 12 credit hours in elective courses* |
| Winter, Academic Term 7 | 15 credit hours in elective courses* |

* Of the 48 credit hours in elective courses required in the program from Terms 1 through 7, $21-36$ credit hours must be chosen from Business electives in Table 4 Business Electives and 12-27 credit hours must be non-Business electives.


### 5.2.3 Regulations for the Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts

Any student who is admitted into the Bachelor of Commerce (Co-operative) program may simultaneously complete the requirements for a Bachelor of Arts program. Under those circumstances, regulations for the Bachelor of Commerce (Co-operative) program will be relaxed as follows. Notwithstanding clauses 4.c. and 4.d. of The Curriculum under the Regulations for the General Degree of Bachelor of Commerce (Co-operative), students in the Bachelor of Commerce (Co-operative) program who are concurrently completing the Bachelor of Arts degree will be permitted to make the following adjustments to those clauses:

1. clause 4.c. - no fewer than 15 credit hours, but no more than 36 credit hours, in Business electives which must be chosen from Table 4 Business Electives.
2. clause 4.d. - no fewer than 12 credit hours, but no more than 33 credit hours, in elective courses chosen from the Faculty of Humanities and Social Sciences.
These adjustments to the normal curriculum will only be permitted for students who are graduating with the Bachelor of Commerce ( Co operative) degree and the Bachelor of Arts degree at the same convocation. In order to meet all of the requirements of both degree programs at the same time, students who are completing the joint degrees are strongly advised to follow Table 2 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with the Bachelor of Arts).

Table 2 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with the Bachelor of Arts)

| Fall and Winter Terms A/B | 6 credit hours in English courses which must include English 1110 or 1021 Mathematics 1000 <br> Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020 ) BUSI 1000 <br> 12 additional credit hours in non-BUSI electives [see Note 1. below] |
| :---: | :---: |
| Fall <br> Academic Term 1 | BUSI 1101, 1210 <br> Statistics 2500 <br> 6 credit hours chosen from: BUSI 1600, 2010, 2400, 2710, and 3 credit elective courses [see Note 1. below) |
| Winter Academic Term 2 | BUSI 2101, 2210 <br> Remaining 9 credit hours chosen from: BUSI 1600, 2010, 2400, 2710, and Core or elective courses [see Note 1. below] |
| Spring | [see Note 2. below] |
| Fall <br> Academic Term 3 | BUSI 300W, 3310, 3401,3700 <br> At least 6 credit hours in Major, Core or elective courses [see Note 3 below] |
| Winter <br> Work Term 1 | BUSI 399W [see Note 2. below] |
| Spring <br> Academic Term 4 | BUSI 4000, 4050, 4320, 4330, 4500 |
| Fall Work Term 2 | BUSI 499W [see Note 2. below] |
| Winter Academic Term 5 | BUSI 5301 <br> At least 12 credit hours in Major, Core or elective courses [see Note 3. below] |
| Spring Work Term 3 | BUSI 599W [see Note 2. below] |
| Fall <br> Academic Term 6 | BUSI 7000 <br> At least 12 credit hours in Major, Core or elective courses [see Note 3. below] |
| Winter Academic Term 7 | At least 15 credit hours in Major, Core or elective courses [see Note 3. below] |

Notes: 1. The Bachelor of Arts requires completion of a Major Program, a Minor Program, a set of Core Requirements (comprising a Breadth of Knowledge Requirement, a Critical Reading and Writing (CRW Requirement), a Language Study (LS) Requirement, and a Quantitative Reasoning (QR) Requirement), and Elective courses, totalling at least 78 credit hours in courses offered by departments within the Faculty of Humanities and Social Sciences. Majors are also available from the following Departments in the Faculty of Science: Computer Science, Mathematics and Statistics, and Psychology. When the Bachelor of Arts is completed jointly with the Bachelor of Commerce (Co-operative):
a. Minor program requirements are satisfied by BUSI courses specified in Table 2 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with the Bachelor of Arts) above.
b. Core requirements for English Critical Reading and Writing (CRW) courses and Quantitative Reasoning (QR) are satisfied by courses completed in Terms $A / B$ or during Terms 1 or 2 of the Bachelor of Commerce (Co-operative) degree. English 1021 does not qualify as a CRW course except for students completing the Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts.
c. It is recommended that the Core Requirement for 6 credit hours in courses in a single language other than English be completed in Terms A/ $B$ of the Bachelor of Commerce (Co-operative) degree program.
d. Major requirements for the Bachelor of Arts may be satisfied in 36 to 45 credit hours, depending on the department or program chosen. Students are strongly recommended to seek advice from the department or program of their Major to ensure that their proposed degree program is possible within the constraints of course scheduling and prerequisites.
2. Students are advised that, in order to complete the joint degrees within the minimum 150 credit hours, they must complete at least five of the courses required for the Bachelor of Arts as opportunities arise and as courses are offered. These courses may be completed during the Spring semesters between Terms $A / B$ and Term 1, between Terms 2 and 3, or during any of the three Work Terms (for example, in the evening or by distance), or as sixth courses during any of the academic terms (following submission of a course load waiver).
3. To meet the requirements for the Bachelor of Commerce (Co-operative), not fewer than 15 and not more than 36 credit hours in Business electives must be chosen from Table 4 Business Electives. Students intending to complete the joint degrees in the minimum number of 150 credit hours should ensure that at least 78 of these credit hours are completed in courses offered by departments within the Faculty of Humanities and Social Sciences. Majors are also available from the following Departments in the Faculty of Science: Computer Science, Mathematics and Statistics, and Psychology. Careful planning, particularly in the selection of elective courses as well as in the sequence of Major program courses, is therefore recommended to ensure timely completion of the joint degrees.

### 5.2.4 Minor or Cognate From Another Academic Unit

1. A student enrolled in the Bachelor of Commerce (Co-operative) program may, using all of the non-Business electives required in the curriculum, complete a minor within the Faculty of Humanities and Social Sciences, the Faculty of Science, the School of Music, or offered at Grenfell Campus. Regulations for the minor are given under the Calendar entries for the Faculty of Humanities and Social Sciences, the Faculty of Science, and the School of Music, and under the Calendar entry for Grenfell Campus.
2. A student enrolled in the Bachelor of Commerce (Co-operative) program may pursue a minor (or equivalent) in other non-business academic units (where minor programs exist) with permission of that academic unit and permission of the Committee on Undergraduate Studies of the Faculty of Business Administration.

### 5.2.5 Examination and Promotion for the Bachelor of Commerce (Co-operative)

1. The Faculty Council of the Faculty of Business Administration constitutes the examining body for all examinations in Business courses. In addition, the standing of every student will be assessed by the Committee on Undergraduate Studies in accordance with the promotion requirements outlined in Clauses 2., 3., and 9. below.
2. Students in Terms $A / B$ will be considered for promotion to Term 1 at the end of the Winter semester of their first year. At that time, for promotion from Terms A/B, students must have successfully completed the 30 credit hours prescribed in 3. of The Curriculum above, with an overall average on those 30 credit hours of at least $65 \%$. Students who do not satisfy these requirements will be required to withdraw from the program and will not be promoted to Term 1.
Students who have been required to withdraw following Terms A/B may be considered for readmission to the program in accordance with the entry under Admission Modes and Requirements above, with the heading Advanced Standing (for Current Memorial University of Newfoundland Students).
A required withdrawal for failure to meet the promotion requirements from Terms $A / B$ will not be reflected on a student's transcript.
3. For promotion from each of Terms 1 through 7 , the requirements are the achievement of a passing grade in at least 12 credit hours and an overall average of at least $60 \%$ in those courses required in each academic term.
Students in an academic term who do not maintain the appropriate course load as outlined in Clause 2. of The Curriculum, and who do not have the prior approval of the Committee on Undergraduate Studies for a reduced course load, will be required to withdraw from the program and will not be promoted.
Students completing Terms 1 through 7 who fail to achieve these standards will be required to withdraw from the program. A required withdrawal from any of Terms 1 through 7 will be reflected on a student's transcript.
Students who meet the academic promotion requirements above but who fail a core course in any of Terms 1 through 7 will be required to successfully repeat that course prior to graduation. Students who meet the promotion requirements above but who fail an elective in any of Terms 1 through 7 will be required to either successfully repeat that elective or successfully complete an additional elective to replace it prior to graduation.
4. The Committee on Undergraduate Studies of the Faculty of Business Administration may promote a student notwithstanding promotion requirements listed in Clause 3. above. A decision of this nature will be made only for reasons acceptable to the Committee on Undergraduate Studies, and in the case of a student thought likely to succeed in future terms.
5. Students who have been required to withdraw following any one of Terms 1 through 3 may be considered for readmission after the lapse of two semesters, at which time they will normally be required to repeat the term which they failed, unless, in the opinion of the Admissions Committee, Faculty of Business Administration, a more meaningful course of study would be appropriate, or they may be considered for readmission to the program in accordance with the entry under Admission Modes and Requirements, Advanced Standing (for Current Memorial University of Newfoundland Students). Students who have been required to withdraw following any one of Terms 4 through 7 may be considered for readmission after the lapse of two semesters, at which time they will normally be required to repeat the term which they failed, unless, in the opinion of the Admissions Committee, Faculty of Business Administration, a more meaningful course of study would be appropriate.
In order to be considered for readmission, students must formally apply for readmission to the program not later than the deadlines specified in the University Diary for the semester in which they wish to recommence their program.
6. The dates for starting and finishing each work term are shown in the University Diary.

Successful completion of the work term requirements is a prerequisite to graduation.
7. A competition for work term employment is organized by Business Co-operative Education.

Students may obtain their own work term jobs outside the competition. Such jobs must be confirmed by letter from the employer and approved by Business Co-operative Education on or before the first day of the work period.
By entering the competition, students give permission for Business Co-operative Education to supply their university transcripts to potential employers.
8. A work report on a topic approved by Business Co-operative Education must be submitted for each work term. This report must be approved by the employer and submitted to Business Co-operative Education on or before the deadline scheduled by Business Cooperative Education. Evidence of the student's ability to gather material relating to the report, analyse it effectively, and present it in a clear, logical and concise form, will be required in the report. Late reports will not be graded unless prior permission for a late report has been given by Business Co-operative Education.
9. The overall evaluation of the work term is the responsibility of Business Co-operative Education. The work term shall consist of two components:
Student performance as evaluated by a co-ordinator, given input from the employer, and a work report graded by a co-ordinator or a member of faculty.
Evaluation of the work term will result in the assignment of one of the following final grades:
a. Pass with Distinction: Indicates EXCELLENT PERFORMANCE in both the work report and work performance. The student is commended for outstanding performance in each of the required components; pass with distinction has been awarded to each of the work report and work performance.
b. Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and work performance. The student fully meets the requirements of a passing work report and completely satisfactory work term performance.
c. Fail: Indicates FAILING PERFORMANCE in the work report and/or the work performance.

For promotion from the work term, a student must obtain PASS WITH DISTINCTION or PASS.
If a student fails to achieve the standards outlined above, the student will be required to withdraw from the program and may be considered for readmission after the lapse of two semesters, at which time the student will be required to complete a further work term with satisfactory performance before being admitted to any further academic term in the Faculty.
10. A student who has been required to withdraw from the program as a result of failing to meet the requirements of either two academic terms or two work terms will not be eligible for readmission to the program.
11. Students are not permitted to drop work terms without prior approval of the Committee on Undergraduate Studies upon the recommendation of Business Co-operative Education. Students who drop a work term without permission, or who fail to honour an agreement to work with an employer, or who conduct themselves in such a manner as to cause their discharge from the job, will normally be awarded a grade of FAL for that work term. Permission to drop a work term does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved work term in lieu of the one dropped.

### 5.2.6 Regulations for the Honours Degree of Bachelor of Commerce (Co-operative)

An Honours Degree of Bachelor of Commerce (Co-operative) signifies superior academic achievement.

1. To be considered for an Honours Degree, the students must so indicate on the prescribed "Application for Graduation " form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.
2. Students for the Honours Degree of Bachelor of Commerce (Co-operative) shall comply with all regulations governing the General Degree of Bachelor of Commerce (Co-operative).
3. A student shall obtain at least a $75 \%$ average and a grade point average of at least 3.5 on the courses which comprise the total number of credit hours required for the degree. Students are not permitted to repeat or substitute courses for the purpose of meeting these criteria.
4. To be eligible for the Honours degree, a student must pass all of the core courses required in Terms 1 through 7 on the student's first attempt.
5. A student who has been required to withdraw from the program as a result of failing to meet the requirements for promotion from academic Terms 1 through 7 or from Work Terms 1, 2, or 3 will not be eligible for an Honours Degree.
6. An applicant for the Honours Degree who fails to fulfill the conditions of Clauses 3., 4., and 5. but fulfills the requirements for a General Co-operative Degree shall be awarded the General Degree of Bachelor of Commerce (Co-operative).

### 5.3 Regulations for the Certificate in Business Administration

1. To be considered for admission to the Certificate in Business Administration, applicants must have at least five years of full-time work experience, or equivalent, that is deemed acceptable by the Admissions Committee of the Faculty of Business Administration.
2. In the case where students have been required to withdraw from one of the Faculty's other undergraduate programs, the Admissions Committee of the Faculty may consider this circumstance as grounds to deny admission.
3. To be eligible for the Certificate in Business Administration, a student must
a. have been admitted to the Certificate Program;
b. successfully complete the following 30 credit hours:
i. Six credit hours in English which must include English 1110 or 1021 ;
ii. BUSI 1000, 1101, 1210, 1600, 2010;
iii. Three of the following: Economics 1010 (or the former 2010), Economics 1020 (or the former 2020), BUSI 2101, 2210, 2400, $2710,3310,3401,3700,4000,4320,4330$, and 4500.
c. achieve an overall average of at least $60 \%$ in the courses that comprise the 30 credit hours specified in clause $3 . b$. A student failing to meet this requirement will be required to repeat one or more courses to raise the overall average to the minimum acceptable level.
4. Every student for the Certificate in Business Administration will be required to complete at least 15 credit hours at this University. The courses comprising these credit hours must be applicable to the Certificate in Business Administration.
5. Every student for the Certificate in Business Administration who has completed a Bachelor's degree at this University, or another recognized university or another post-secondary institution, will be required to complete at least 15 credit hours at this University beyond those required for that degree. The courses comprising these credit hours must be applicable to the Certificate in Business Administration
6. Course prerequisites for all courses shall apply to all courses in the Certificate in Business Administration. Students should note, for example, that Mathematics 1000 is a prerequisite and Statistics 2500 is a co-requisite for BUSI 2400. It should be noted that some courses are not offered every semester.

### 5.4 Regulations for the Diploma in Business Administration

1. To be considered for admission to the Diploma Program in Business Administration, applicants must normally have satisfied the following requirements:
a. Successful completion of 15 academic credit hours as follows:

Six credit hours in English which must include English 1110 or 1021;
Mathematics 1000 ;
BUSI 1000;
iv. Three credit hours of non-Business electives.

Only students with an overall average of at least $60 \%$ in the courses comprising the 15 credit hours required will be considered for admission to the program.
Overall academic performance is an important criterion in reaching decisions on applications for admission, and will be considered, in addition to the average on the five courses required for admission, in the selection process. Students with weak overall academic records are unlikely to be admitted.
b. At least five years of full-time work experience, or equivalent, that is deemed acceptable by the Admissions Committee of the Faculty of Business Administration.
In the case where students have been required to withdraw from one of the Faculty's other undergraduate programs, the Admissions Committee of the Faculty may consider this circumstance as grounds to deny admission.
2. To be eligible for the Diploma in Business Administration, a student must:
a. have been admitted to the Diploma Program;
b. successfully complete the following 45 credit hours in addition to the 15 credit hours required for admission (a total of 60 credit hours):
i. Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020);
ii. Statistics 2500 or equivalent;
iii. BUSI 1101, 1210, 1600, 2400, 2710, 3310, 4000, and 4500;
iv. Four of the following, one of which must be either BUSI 4320 or 4330: BUSI 2010, 2101, 2210, 3401, 3700, 4050, 4320, and 4330.
c. Achieve an overall average of at least $60 \%$ in the courses which comprise the 45 credit hours specified in clause 2 . b. A student failing to meet this requirement will be required to repeat a course(s) to raise the overall average to the minimum acceptable level.
d. Successfully complete a comprehensive case analysis with report (BUSI 450W). BUSI 450W will not be required of students who complete BUSI 4050 from the list in 2.b.iv. above.
e. Students planning to pursue their Bachelor of Business Administration (see Regulations for the General Degree of Bachelor of Business Administration (B.B.A.)) are encouraged to note the prerequisites for BUSI 7000 and to plan their courses so that they have completed the prerequisites prior to the semester in which they plan to take BUSI 7000.
3. a. Every student for the Diploma in Business Administration will be required to complete at least 30 credit hours at this University. The courses comprising these credit hours must be applicable to the Diploma in Business Administration.
b. Every student for the Diploma in Business Administration, who has completed a Bachelor's degree at this University or another recognized university or university college, will be required to complete at least 30 credit hours at this University beyond those required for that degree. The courses comprising these credit hours must be applicable to the Diploma in Business Administration.

### 5.4.1 Continuance Regulations

1. The Faculty Council of the Faculty of Business Administration constitutes the examining body for all examinations in Business courses. In addition, the standing of every student will be assessed by the Committee on Undergraduate Studies in accordance with the continuation requirements outlined in 2 . below.
2. Students must qualify for continuation after each term of study. To continue, students must have an overall average of at least $60 \%$ over their last ten courses taken. In the event that a student has more courses than needed in the earliest term used, the courses with the highest grades in that term will be used.
3. Students who fail to achieve the standards outlined in 2. above normally will be required to withdraw from the program. They may be considered for readmission after a lapse of two semesters. In order to be considered for readmission, students must formally apply for readmission.
4. Students who are required to withdraw a second time are not eligible for readmission into the program.
5. The Committee on Undergraduate Studies of the Faculty of Business Administration may allow a student to continue who fails to achieve the standards outlined in 2. above. A decision of this nature will be made only for reasons acceptable to the Committee on Undergraduate Studies.

### 5.5 Regulations for the General Degree of Bachelor of Business Administration

 (B.B.A.)The application for admission or readmission to programs offered by the Faculty of Business Administration is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

### 5.5.1 The Curriculum

1. To be admitted to the B.B.A. program, students should select the B.B.A. program on their online application to the University or on the Declaration/Change of Academic Program Form.
2. To be considered for graduation with the B.B.A., students must successfully complete the following 120 credit hours with a grade point average on those 120 credit hours of at least 2.5 and a numeric average on those 120 credit hours of at least $60 \%$ :
a. Six credit hours of English which must include English 1110 or 1021;
b. Mathematics 1000 ;
c. Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020);
d. Statistics 2500;
e. Business $1000,1101,1210,1600,2010,2101,2210,2400,2710,3310,3401,3700,4000,4050,4320,4330,4500,5301$, and 7000. Students are encouraged to note the prerequisites for 7000 (Strategic Management 2) and to plan their courses so that they have completed the prerequisites prior to the semester in which they plan to take 7000.
f. 45 credit hours of electives, of which not more than 21 credit hours may be from Business courses (which must be chosen from Table 4 Business Electives).

### 5.5.2 Minor or Cognate From Another Academic Unit

1. A student enrolled in the B.B.A. program may complete a minor within the Faculty of Humanities and Social Sciences, the Faculty of Science, the School of Music, or from Grenfell Campus. Regulations for the minor are given under the Calendar entries for the Faculty of Humanities and Social Sciences, the Faculty of Science, the School of Music, and Grenfell Campus.
2. A student enrolled in the B.B.A. program may pursue a minor (or equivalent) in other non-business academic units (where minor programs exist) with permission of that academic unit and permission of the Committee on Undergraduate Studies of the Faculty of Business Administration.

### 5.6 Regulations for the Honours Degree of Bachelor of Business Administration

An Honours degree of Bachelor of Business Administration signifies superior academic achievement. The difference between a First Class General B.B.A. degree and an Honours B.B.A. degree is that for a First Class B.B.A., a student must obtain a grade point average of at least 3.5 on the best 120 credit hours which meet curriculum requirements, and for an Honours B.B.A., a student must obtain a grade point average of at least 3.5 on the earliest attempt at courses which meet curriculum requirements.

1. To be considered for an Honours degree, a student must so indicate on the University's official Application for Graduation form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.
2. A student for the Honours Degree of Bachelor of Business Administration shall:
a. comply with all regulations governing the General Degree of Bachelor of Business Administration, and
b. obtain at least a $75 \%$ average and a grade point average of at least 3.5 on the courses prescribed in The Curriculum. Students are not permitted to repeat or substitute courses for the purpose of meeting these criteria. In the case of a student who has repeated courses and/or who has completed more than 120 credit hours at the time of application for graduation, applicable courses will be taken in chronological order rather than in order of grade in calculating these averages. This may mean that failed courses will be used in calculating this grade point average even when the courses were later repeated and passed or, in the case of electives, replaced with other courses later in a student's academic career.
3. A declared student for an Honours degree who fails to fulfil the conditions of clause 2. but fulfils the requirements for a General degree shall be awarded the General Degree of Bachelor of Business Administration.

### 5.7 Joint Degrees of Bachelor of Business Administration and Bachelor of Music

### 5.7.1 Admission Requirements

1. Admission to the program is competitive and selective. Prospective students are therefore encouraged to consider an alternate degree program in the event that they are not accepted into the Joint Degrees of Bachelor of Business Administration and Bachelor of Music program.
2. Applicants who have been awarded a Bachelor of Music Degree or an undergraduate Business degree from this University may not complete the Joint Degrees of Bachelor of Business Administration and Bachelor of Music program.
3. Applicants for the Joint Degrees of Business Administration and Bachelor of Music program must meet the Admission/ Readmission Requirements to the Bachelor of Music Degree Program and must be admitted to that program.
4. All applicants must submit a 750-word letter of motivation highlighting the applicant's relevant past experiences, career plans, and motivation for pursuing the joint degrees program.
5. Applicants may be requested to attend an interview.

### 5.7.2 The Curriculum

1. To be considered for the award of the Joint Degrees of Business Administration and Bachelor of Music, a student shall comply with all regulations of the Faculty of Business Administration and the School of Music regarding the respective degrees, except:
a. Notwithstanding clauses 5., 6., and 7. of the Core Program under the Bachelor of Music Degree Regulations, students in the Bachelor of Music program who are concurrently completing the Bachelor of Business Administration program will be exempted from clauses 5. and 6., and will be permitted to replace clause 7. with the following:
Ensemble II: 10 credit hours according to Principal Applied Study below:
i. Voice: Music 2700 and 2701, and 2 credit hours from Music 2611-2612, plus 6 additional credit hours from Music 2611, 2612, 2616, 2617, 3517 or 3518 with a maximum of 1 credit hour from Music 3517-3518. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
ii. Piano, organ, or guitar 8 credit hours chosen from Music 2611-2620, 3517, 3518 with at least 2 credit hours from Music 2611-2612 and no more than 2 credit hours from Music 3517-3518. An additional 2 credit hours of music electives chosen from courses beyond the 1000 level. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
iii. All other Principal Applied Study, i.e. percussion or a string or wind instrument: 10 credit hours from Music $2611-2615,2619,2620,3517,3518$, with at least 1 credit hour chosen from Music 2611 or Music 2612, and no more than 1 credit hour chosen from Music 3517 or 3518 . Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
b. Notwithstanding clause 2.e. of The Curriculum under Regulations for the General Degree of Bachelor of Business

Administration (B.B.A.), students in the Bachelor of Business Administration program who are concurrently completing the Bachelor of Music program will be permitted to replace that clause as follows: BUSI 1000, 1101,1210, 1600, 2010, 2101, 2210, $2400,2710,3310,3401,3700,4000,4050,4320,4330,4500,5301$, and 7002 . Students are encouraged to note the prerequisites for BUSI 7002 and to plan their courses so that they have completed the prerequisites prior to the semester in which they plan to take BUSI 7002.
c. These adjustments to the normal curriculum will only be permitted for students who are graduating with the Bachelor of Business Administration and the Bachelor of Music degrees at the same convocation. In order to meet all of the requirements of both degree programs at the same time, students who are completing the joint degrees are strongly advised to follow Table 3 Joint Degrees of Bachelor of Business Administration and Bachelor of Music Curriculum.
2. To be considered for the Joint Degrees of Bachelor of Business Administration and Bachelor of Music, students must successfully complete the following 160 credit hours with a grade point average on those 160 credit hours of at least 2.5 and a numeric average on those 160 credit hours of at least $60 \%$.
a. 53 credit hours from the Bachelor of Music Core Program as modified in clause 1.a. above;
b. Music $340 \mathrm{~A} / \mathrm{B}, 440 \mathrm{~A} / \mathrm{B}, 4800$;
c. 6 credit hours chosen from Musicologies or Music Theory and Composition courses beyond the 2000 level;
d. 12 credit hours chosen from Music courses beyond the 1000 level including:
i. a maximum of 2 credit hours from Music 2611-2614, 2619, 2620, 263A/B in addition to those from the Music Core Program modified in clause 1.a. above;
ii. a maximum of 2 credit hours from Music 2615-2617, 265A/B, 3514-3518 in addition to those from the Music Core Program modified in clause 1.a. above;
iii. no more than 3 credit hours from Music 2021-2023;
iv. a maximum of 6 credit hours from Music 3500-3513;
e. 6 credit hours of English which must include English 1110 or 1021;
f. Mathematics 1000;
g. Economics 1010 and 1020;
h. Statistics 2500; and
i. BUSI 1000, 1101,1210, 1600, 2010, 2101, 2210, 2400, 2710, 3210, 3310, 3401, $3700,4000,4050,4320,4330,4500$, 5301 , and 7002.

Table 3 Joint Degrees of Bachelor of Business Administration and Bachelor of Music Curriculum

| Fall <br> Academic Term 1 | BUSI 1000 <br> Mathematics 1090 or 1000 [see note 1 below] <br> Music 140A, 1005, 1107, 1117, 1700 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| :---: | :---: |
| Winter Academic Term 2 | BUSI 1600 <br> Economics 1010 or Mathematics 1000 if not completed in Term 1 [see note 1 below] <br> English 1090 <br> Music 140B, 1006, 1108, 1118 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Fall <br> Academic Term 3 | Economics 1020 <br> English 1110 <br> Music 240A, 2005, 2107, 2117 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Winter <br> Academic Term 4 | BUSI 1210, 2010 <br> Economics 1010 if not completed in Term 2 [see note 1 below] <br> Music 240B, 2006, 2108, 2118 <br> 1 credit hour chosen to meet Ensemble II eredit requirements outlined in clause 1.a. of The Curriculum |
| Fall Academic Term 5 | BUSI 1101, 2210 <br> Music 340A, 3009, 3105 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Winter Academic Term 6 | BUSI 2101, 2400 <br> Music 340B <br> Statistics 2500 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Fall Academic Term 7 | BUSI 2710, 3310,3700 <br> Music 440A <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Winter Academic Term 8 | BUSI 3401, 4000, 4330 <br> Music 440B <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Fall <br> Academic Term | BUSI 4050, 4320, 4500 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Winter Academic Term 10 | BUSI 3210, 5301, 7002 <br> Music 4800 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Harlow Campus | Optional: 6 credit hours in the Harlow Music Semester offered at Harlow Campus. [see note 2 below] |

[^0] 1000 in place of Economics 1010 in Term 2, and Economics 1010 in Term 4.
2. Students who elect not to participate in the Harlow Music Semester offered at Harlow Campus must complete a total of 6 additional credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum as opportunities arise and as courses are offered during Term 5 through Term 10.
3. Students who wish to deviate from the above curriculum, including students who wish to complete online courses or courses in the Spring semester, Intersession, or Summer session, should consult with an advisor in the Faculty of Business Administration or the School of Music to ensure that they do not experience unforeseen delays in completing the joint degrees program.

### 5.8 Regulations for the General Degree of International Bachelor of Business Administration (i.B.B.A.)

The application for admission or readmission to programs offered by the Faculty of Business Administration is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

### 5.8.1 General Regulations

1. The International Bachelor of Business Administration (i.B.B.A.) program requires a total of 120 credit hours with a minimum average of $65 \%$ on those 120 credit hours.
2. In this program, students are expected to gain knowledge of and to experience the cultural and business environment of a global region other than their home, or primary region. In order to achieve this bi-cultural knowledge and experience, students must nominate a second global region on which to focus in their program. The choice of the second region will affect the choice of courses to meet the Bi-Cultural Global and Regional Content and the Cross-Cultural Study Experience requirements.
3. The program includes a compulsory, approved, full-time cross-cultural study experience as outlined in the Cross-Cultural Study Experience regulations.

### 5.8.2 Admission Requirements

1. Normally, admission is offered for the Fall semester. Where circumstances permit, applications will be considered for the Winter and Spring semesters. The deadlines for admission or readmission are specified in the University Diary.
2. Students who are seeking admission for the Fall semester normally must have completed all the courses required for admission by the end of the Winter semester.
3. Applications received after the deadline will be considered only if a space is available in the program.
4. To be eligible for Admission to the i.B.B.A. program an applicant must have successfully completed the Pre-i.B.B.A. program (see The Curriculum, clause 1, below) with an average on those courses of at least 65\%, or the equivalent at another recognized postsecondary institution. Students who are transferring from other universities must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits.
5. Admission is competitive and selective. Therefore, prospective students are encouraged to consider an alternate degree program in the event that they are not accepted into the International Bachelor of Business Administration program.
6. The primary criterion used in reaching decisions on applications for admission is overall academic achievement. Selection, therefore, will be based on a student's overall academic performance in addition to the average on the 30 credit hours required for admission. Students with weak overall academic records are unlikely to be admitted.
7. In the case where an applicant has been required to withdraw from one of the Faculty's other Undergraduate programs, the Admissions Committee of the Faculty may consider this circumstance as grounds to deny admission.

### 5.8.3 The Curriculum

1. The i.B.B.A. program includes the following 30 credit hours that comprise the Pre-i.B.B.A. program:
a. Six credit hours of English which must include English 1110 or 1021;
b. Mathematics 1000 ;
c. Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020);
d. BUSI 1000;
e. Political Science 2200 ;
f. Nine additional credit hours in non-BUSI courses. It is strongly recommended that students take into account the Bi-Cultural Global and Regional Content requirement outlined below when choosing these additional 9 credit hours of study.
2. In addition to the Pre-i.B.B.A. program requirements, the curriculum shall consist of the successful completion of:
a. Thirty-nine credit hours consisting of: Statistics 2500 and BUSI courses 1101,1210, 2010, 2101, 2400, 3310, 3401, 3700, 4000, 4320,4500 , and either 7000 or 7005 .
b. Fifteen credit hours of international business related courses, which must include:
i. BUSI 5302 and either Economics 3030 or BUSI 6550; and
ii. any three from: BUSI 6311, BUSI 7005 (if not completed to fulfill 2.a.i above), BUSI 7240, BUSI 6550 (if not completed to fulfill 2.b.i. above), BUSI 6040, Economics 4030, or Political Science 3250 or any other approved course with an international focus.
Pre-requisites for all courses shall apply to the i.B.B.A. program. Students should note, for example, that the pre-requisites for BUSI 7000 include BUSI 4050 and BUSI 5301, which are not program requirements for the i.B.B.A.
c. Thirty-six further credit hours, of which at least 12 must be in non-BUSI courses. Students should take into account the NonBusiness Elective Courses regulations under the Bi-Cultural Global and Regional Content when choosing these 12 credit hours of non-business electives.
d. It is recommended that students choose their elective courses so that their overall program contains at least one group of four or five courses within a chosen functional area or specialization or minor.
3. Students shall complete an approved Cross-Cultural Study Experience, as outlined below. Courses taken by distance education from Memorial University of Newfoundland may not be used to satisfy the Cross-Cultural Study Experience requirement.
4. For graduation, a student must be enrolled in the i.B.B.A. program, and have completed the 120 credit hours required with a minimum average of $65 \%$ on those 120 credit hours.

### 5.8.4 Bi-Cultural Global and Regional Content

Courses chosen to meet the above requirements must have coherent, bi-cultural, global and regional content as outlined in Regulations for the General Degree of International Bachelor of Business Administration (i.B.B.A.), General Regulations. The choice of regions will affect the choice of non-BUSI elective courses as well as the choice of location and content of the cross-cultural study
experience. Students must consult with the Undergraduate Programs Office of the Faculty of Business Administration when selecting courses to satisfy the bi-cultural global and regional content requirement to ensure that the selected courses will fulfill the requirement.

### 5.8.4.1 Non-Business Elective Courses

1. Students must complete a minimum of 21 credit hours of non-business elective courses with coherent, bi-cultural, global and/or regional content. These courses must include:
a. at least 6 credit hours with a specific regional perspective of the student's home, or primary region;
b. at least 6 credit hours with a specific regional perspective of the student's second global region. The study of a regional language may be used to meet this requirement; and
c. students planning to undertake their cross-cultural study experience where English is not the main language must complete 6 credit hours of study of the relevant language prior to undertaking the cross-cultural study experience.

### 5.8.4.2 Cross-Cultural Study Experience

1. The cross-cultural study experience provides an opportunity for students to immerse themselves in the culture, business environment, and language of their second global region in the context of the skills gained in the i.B.B.A. program. Students must submit a rationale in support of their choice of a location for their cross-cultural study experience. The rationale should indicate:
a. how the location supports the chosen second region;
b. how the location uses and builds on prior coursework and prior education, employment, and personal experiences; and
c. the courses to be completed on the cross-cultural study experience.
2. The Cross-Cultural Study Experience must be approved by the Undergraduate Programs Office before it can begin.
3. To ensure that students obtain regional perspectives and skills different from those to which they were exposed in their previous education, an approved cross-cultural study experience must include:
a. at least 9 credit hours with specific regional content;
b. at foreign language locations, at least 3 of the 9 credit hours above must be study of a regional language; and
c. at locations where English is the main language, at least 3 of the 9 credit hours identified above must normally be in nonbusiness electives.
4. Notwithstanding the General Regulations above and the Continuance Regulations below, a student may be held back from participating in the Cross-Cultural Study Experience if the student has not completed at least ten courses since admission to the i.B.B.A. program or has not completed a course load of 15 credit hours with a semester average of at least $65 \%$ in a single semester. A student who is prevented from starting the Cross-Cultural Study Experience for either of these reasons will be permitted to participate in the Cross-Cultural Study Experience once the student has met these criteria
5. Students must normally have completed at least 72 credit hours of the program prior to commencement of the Cross-Cultural Study Experience.
6. Students should note that graduation may be delayed if they commence the Cross-Cultural Study Experience in the final semester of their program because of delays in receiving official transcripts from partner institutions.
7. Students must successfully complete either at least 12 credit hours in a single semester, or at least 9 credit hours in each of three semesters, while on the cross-cultural study experience.
8. For the Cross-Cultural Study Experience, courses regarded as having specific regional content would include languages, regional studies and other cross-cultural courses as well as approved courses in Economics and Business.

### 5.8.5 Minor From Faculty of Humanities and Social Sciences

A student enrolled in the i.B.B.A. program may both meet the requirements of the degree and be able to complete a minor within the Faculty of Humanities and Social Sciences. Regulations for the minor are given under the Calendar entries for the Faculty of Humanities and Social Sciences.

### 5.8.6 Continuance Regulations

1. The Faculty Council of the Faculty of Business Administration constitutes the examining body for all examinations in Business courses. In addition, the standing of every student will be assessed by the Committee on Undergraduate Studies in accordance with the continuation requirements outlined in 2. and 3. below.
2. Following entry to the program, i.B.B.A. students must qualify for continuation after each term of study. For continuation, students must have an overall average of $65 \%$ over their last ten courses taken. In the event that a student has more courses than needed in the earliest term used, the courses with the highest grades in that term will be used.
Students who fail to achieve these standards will be required to withdraw from the program. They may be considered for readmission after a lapse of two semesters. In order to be considered for readmission, students must formally apply for readmission.
A required withdrawal for failure to meet Continuance Regulations in the i.B.B.A. program will be reflected on a student's transcript.
3. Students who are required to withdraw from the program a second time are not eligible for readmission into their program.
4. The Committee on Undergraduate Studies of the Faculty of Business Administration may allow a student to continue who fails to achieve the standards outlined in 2 . above. A decision of this nature will be made only for reasons acceptable to the Committee on Undergraduate Studies.

### 5.9 Regulations for the Honours Degree of International Bachelor of Business Administration

An Honours degree of Bachelor of International Business Administration signifies superior academic achievement.

1. To be considered for an Honours degree, applicants must so indicate on the University's official Application for Graduation form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.
2. Applicants for the Honours Degree of International Bachelor of Business Administration shall:
a. comply with all regulations governing the General Degree of International Bachelor of Business Administration, and
b. obtain at least a $75 \%$ average and a grade point average of at least 3.5 on the 120 credit hours completed for the degree.
3. Applicants are not permitted to repeat or substitute courses for the purpose of meeting the academic standing specified in Clause 2. In the case of a student who has repeated courses and/or who has completed more than 120 credit hours at the time of application for graduation, applicable courses will be taken in chronological order rather than in order of grade in calculating 2.b. above.
4. A declared student for an Honours degree who fails to fulfil the conditions of Clause 2 but fulfils the requirements for a General degree shall be awarded the General Degree of International Bachelor of Business Administration.

## 6 Business Concentrations

Students completing degrees in the Faculty of Business Administration may choose to complete their Business electives in a number of different areas or to concentrate in one of the areas outlined below. In either case, students must complete the required number of BUSI and non-BUSI electives outlined in the program regulations for the degree in which they are enrolled. BUSI electives must be chosen Table 4 Business Electives. A concentration provides students with the opportunity to focus their studies in one of the following areas. Particular attention should be paid to necessary prerequisites when scheduling courses. Students enrolled in Study Abroad programs should consult with the appropriate Faculty of Business Administration Area Group Coordinator regarding the applicability of courses taken while studying abroad to their chosen concentration. Students pursuing programs other than the Bachelor of Commerce (Cooperative) should note that certain concentrations might require them to take additional courses beyond those required for the degree. Please note that these concentrations are neither binding nor official. Students are not required to complete a concentration and even if they do, it is not reflected on their transcripts or degree parchments.

### 6.1 Accounting

Students electing an Accounting concentration should complete the following courses:
BUSI 5160, BUSI 5500, BUSI 6100, BUSI 6110, BUSI 6120, BUSI 6130, BUSI 7120, BUSI7125, and BUSI 7160.

### 6.2 Finance

Students electing a Finance concentration should complete the following courses:

1. BUSI 5500, BUSI 6100, BUSI 6110, BUSI 6510, BUSI 7010, BUSI 7500, and BUSI 7510; and
2. any two of the following courses: BUSI 6120, BUSI 6130, BUSI 6550, BUSI 7120, BUSI 7150, or Economics 3150.

### 6.3 Human Resources and Labour Relations

Students electing the Human Resources and Labour Relations concentration should complete the following courses:

1. BUSI 6320 and BUSI 7310 and
2. any six of the following: BUSI 6301, BUSI 6310, BUSI 6311, BUSI 6312, BUSI 6330, BUSI 7315, BUSI 7320, BUSI 7321, BUSI 7322, BUSI 7330, Economics 3360 and any other Human Resources or Labour Relations course (or courses) offered by the Faculty of Business Administration at the 6000 or 7000 level.

### 6.4 Information Systems

Students electing an Information Systems concentration should complete the following courses:

1. Six of BUSI 5700, BUSI 5701, BUSI 5702, BUSI 5703, BUSI 6700, BUSI 6701, BUSI 7700, and BUSI 7701; and
2. a. either Geography 2195, Geography 3260, and one of Geography 3202, Geography 4202, Geography 4261
b. or three of the following: or the former Computer Science 2710, Computer Science 2500, the former Computer Science 2710, the former Computer Science 2760, Computer Science 3710, the former Computer Science 3715, the former Computer Science 4761, the former Computer Science 4767.

### 6.5 International Business

Students electing an International Business concentration should complete the following eight courses, of which at least five should be from the Faculty of Business Administration:

1. BUSI 5302, Political Science 2200 and either BUSI 6550 or Economics 3030; and
2. any five of the following: BUSI 6040, BUSI 6311, BUSI 6330, BUSI 6550, BUSI 7005, BUSI 7240 and other courses with global or regional business content selected in consultation with the Coordinator of the i.B.B.A. program. These may include courses taken as part of an approved Study Abroad program (up to a maximum of 9 credit hours).

### 6.6 Marketing

Students electing a Marketing concentration should complete the following courses:

1. BUSI 3210, BUSI 5220, and BUSI 7230; and
2. any three of the following. BUSI 5210, BUSI 5217, BUSI 6217, the former BUSI 6218, BUSI 6230, BUSI 6241, BUSI 6250, BUSI 7240 , or the former BUSI 7250.

### 6.7 Operational Research

Students electing a Operational Research concentration should complete the following eight courses:

1. BUSI 5401, BUSI 5402, BUSI 6400, and BUSI 7400; and
2. any four of: the former Computer Science 1710, the former Computer Science 2710, Mathematics 1001, Mathematics 2050, and any Business Information Systems course (or courses) at the 5000 level or above.

### 6.8 Resource-Based Industries Management

Students electing a Resource-Based Industries Management concentration should complete the following courses:

1. BUSI 5000, BUSI 5020, BUSI 5302, BUSI 5500, BUSI 7010, and BUSI 7410; and
2. any three of the following courses: BUSI 5250, BUSI 6040, BUSI 6410, BUSI 6415, BUS1 7322, BUSI 7500, BUSI 7510, Economics

3080, Economics 4090, Engineering 8671, Geography 2425, Geography 3425, Political Science 3210, Political Science 3250, Sociology 4091, and Sociology 4104; at least one of which must be chosen from Economics 3080, Economics 4090, Engineering 8671, Geography 2425, and Geography 3425.
Students completing the Bachelor of Business Administration program must either choose two courses from Economics 3080, Economics 4090, Engineering 8671, Geography 2425, Geography 3425, Political Science 3210, and Political Science 3250, or must complete a non-Business elective in addition to the courses required for their program in order to meet clause 2.f. under Regulations for the General Degree of Bachelor of Business Administration (B.B.A.), The Curriculum.
Students considering choosing to complete Engineering 8671 must consult with the Undergraduate Programs Office, Faculty of Business Administration, regarding prerequisites.

### 6.9 Small Business/Entrepreneurship

Students electing a Small Business/Entrepreneurship concentration should complete the following courses:

1. BUSI 3610, BUSI 3630, BUSI 5220, BUSI 6605, BUSI 7010, and BUSI 7600; and
2. any three of the following: BUSI 6120, the former BUSI 6220, BUSI 6250, BUSI 6312, BUSI 6610, BUSI 7230,or BUSI 7240 .

### 6.10 Supply Chain Management

Students electing a Supply Chain Management concentration should complete the following courses:
BUSI 5401, BUSI 5402, BUSI 6410, BUSI 6415, BUSI 7410, and BUSI 7415.

## 7 Business Electives

Only those courses listed below are acceptable as Business electives towards the Bachelor of Commerce (Co-operative), Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts, and Bachelor of Business Administration programs.

Table 4 Business Electives

| the former BUSI 3101 | BUSI 6040 | BUSI 6700 | BUSI 7510 | Economics 4026 |
| :---: | :---: | :---: | :---: | :---: |
| BUSI 3210 | BUSI 6041-6060 | BUSI 6701 | BUSI 7600 , | Economics 4090 |
| BUSI 3610 | BUSI 6100 | BUSI 7005 | BUSI 7700 | Engineering 8671 |
| BUSI 3630 | BUSI 6110 | BUSI 7010 | BUSI 7701 , | Geography 2195 |
| BUSI 5000 | BUSI 6120 | BUSI 7110 | BUSI7320 | Geography 2425 |
| BUSI 5020 | BUSI 6130 | BUSI 7120 | the former Computer Science 1710 | Geography 3202 |
| BUSI 5160 | BUSI 6217 | BUSI 7125 | Computer Science 2500 | Geography 3260 |
| BUSI 5210 | BUSI 6230 | BUSI 7150 | the former Computer Science 2710 | Geography 3425 |
| BUSI 5217 | BUSI 6241 | BUSI 7160 | the former Computer Science 2711 | Geography 4202 |
| BUSI 5220 | BUSI 6250 | BUSI 7218 | the former Computer Science 2752 | Geography 4261 |
| BUSI 5250 | BUSI 6301 | BUSI 7230 | the former Computer Science 2760 | Mathematics 1001 |
| BUSI 5302 | BUSI 6310 | BUSI 7240 | Computer Science 3710 | Mathematics 2050 |
| BUSI 5401 | BUSI 6311 | BUSI 7310 | the former Computer Science 3715 | Mathematics 2090 |
| BUSI 5402 | BUSI 6312 | BUSI 7315 | the former Computer Science 4761 | Political Science 2200 |
| BUSI 5500 , | BUSI 6320 | BUSI 7320 | the former Computer Science 4767 | Political Science 3210 |
| BUSI 5530 | BUSI 6400 | BUSI 7321 | Economics 3000 | Political Science 3250 |
| BUSI 5700 | BUSI 6410 | BUSI 7322 | Economics 3010 | Sociology 4091 |
| BUSI 5700 | BUSI 6415 | BUSI 7330 | Economics 3030 | Sociology 4104 |
| BUSI 5701 , | BUSI 6510 | BUSI 7400 | Economics 3080 |  |
| BUSI 5702 | BUSI 6550 | BUSI 7410 | Economics 3150 |  |
| BUSI 5703 | BUSI 6605 | BUSI 7415 | Economics 3360 |  |
| BUSI 6000-6029 | BUSI 6610 | BUSI 7500 | Economics 4025 |  |

## 8 Waiver of Faculty Regulations

Any student has the right to request waiver of Faculty regulations. For further information refer to UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate) - Waiver of Regulations.

## 9 Appeal of Decisions

Any student whose request for waiver of Faculty regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 10 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, course descriptions for courses which have not been offered in the
previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the Faculty.

Unless otherwise specified in the course description or awarded as transfer credit, only business courses offered by the Faculty of Business Administration and designated as BUSI are applicable to programs of the Faculty of Business Administration.
All courses of the Faculty are designated by BUSI.

### 10.1 Service Course Descriptions

## 2000 Business Communications - inactive course

2102 Introductory Accounting for Non-Business Students provides full introductory coverage of both financial and managerial accounting. The course focuses on the most widely used accounting theory and practice.

CR: BUSI 1101 or BUSI 2101

### 10.2 Core and Elective Course Descriptions

Enrolment in Business courses is limited and first priority will be given to students registered in the Faculty of Business Administration programs and to Business Minor students who have obtained the approval of the Dean of the Faculty of Business Administration or delegate.
1000 Introduction to Business in Society (formerly BUSI 2001) introduces the basics of business and business corporations in society, in a real-world relevant manner. Particular attention is given to societal stakeholders and to corporations' internal business processes and management functions. Major emphases include corporate social responsibilities and management ethics, and these are recurring themes in other topics such as technology, globalization and people in organizations. The course is a combination of textbook theory and guided learning activities and assignments based on finding and integrating real-world information.
CR: the former BUSI 2001, Business 1010
UL: may be used in place of Business 1010 in programs offered in
Business Administration at the Grenfell Campus
1101 Principles of Accounting emphasize the concepts and issues of introductory financial accounting as they relate to the Canadian conceptual framework, and will also address the strengths and weaknesses of financial reporting at an introductory level. The student will be introduced to the accounting process and analysis of the balance sheet, income statement, and the statement of cash flows.
CR: BUSI 2102, the former BUSI 3100, Business 2100
PR: Mathematics 1090 or 109B or a combination of placement test and high school Mathematics scores acceptable to the Faculty

1210 Introduction to Marketing Strategy introduces students to the concepts, analyses, and activities that comprise marketing strategy, and provides practice in assessing and solving strategic problems in marketing. The course is also a foundation for BUSI 2210 Introduction to Marketing Tactics, and for advanced electives in marketing. Topics include: marketing strategy, environmental analysis, competitive analysis, customer behaviour, marketing research, segmentation, targeting, and positioning.
CR: the former BUSI 1201; Business 2200
PR: English 1110 or 1021, BUSI 1000
1600 Introduction to Entrepreneurship provides students with a basic understanding of entrepreneurship and its vital role in innovation and economic development. The course will explore and critique the entrepreneurship phenomenon while fostering the development of an entrepreneurial mindset and the skills and knowledge necessary for participating in the entrepreneurial process. The course will examine opportunity identification and evaluation, creative problem solving, the ability to recognize entrepreneưrial potential, risk-taking, exercising initiative and personal responsibility to achieve goals, the process of launching new ventures, local and international entrepreneurial ventures, and various paths to firm ownership. The course approaches entrepreneurship as a way of thinking and acting that can be useful in any organizational setting.
2010 Business Research and Writing develops research, writing, and oral communication skills In an interactive environment that encourages practice and participation. Through ongoing evaluation, students learn the fundamentals of business research using secondary sources. A key focus Is the writing process, Including grammar, punctuation, structure, flow, and style. Students develop oral presentation skills through in-class presentations. Students must demonstrate mastery of the material by successfully completing each of the written communication, grammar, and oral communication course components.
CR: BUSI 2000, Business 2020
PR: BUSI 1000, and English 1110 or 1021
2101 Managerial Accounting provides an overview of the use of financial data for managerial decision making. The student will be introduced to basic budgeting and analysis techniques for both service-oriented and manufacturing businesses.

CR: BUSI 2102, Business 2110, the former BUSI 4100 PR: BUSI 1101

2210 Introduction to Marketing Tactics introduces students to the concepts, analyses, and activities that comprise marketing tactics, and provides practice in making decisions about tactical problems in marketing. The course is also a foundation for advanced electives in marketing. Topics include: product management, pricing, marketing communications, channels of distribution, implementation, and budgeting.
CR: the former BUSI 2201, Business 2250
PR: BUSI 1210 or the former BUSI 1201
2220 Personal and Business Branding with Social Media develops students' ability to design and refine on-line personal brands and display brands through social media channels.
CR: the former BUSI 6004, the former BUSI 6042, and the former BUSI 6240; Business 3230

2400 Decision Modeling provides an introduction to: spreadsheet modeling; linear optimization and the related topics of integer, assignment, and transportation models; and decision analysis including payoff matrices, decision trees, and Bayesian revision. All topics will be taught within the context of business applications.
CO: Statistics 2500
CR: the former BUSI 4401
PR: Mathematics 1000
2710 Modeling and Implementing Business Processes introduces techniques for understanding and modelling business processes and implementing them in modern enterprise systems. Course work will be project-based; students will create small-scale business applications, including web-based applications, using current design and development methodologies and tools.
PR: BUSI 1000, and English 1110 or 1021
300W Business Professional Development Seminars expose students to both theoretical and practical aspects of co-operative education in general and the work term in specific prior to the first work term. The seminars will utilize a combination of lectures, workshops, guest speakers, panel discussions, and practical exercises to prepare students for their work terms. This course will be evaluated as PAS or FAL based on attendance, participation, and assignments.
AR: attendance is required
$\mathrm{CH}: 0$
LC: as scheduled
. admission to the Bachelor of Commerce (Co-operative) Program
3210 Consumer Behaviour (formerly BUSI 5200) deals with concepts related to factor's which influence the purchase and consumption behaviour of individuals including culture, social class, reference groups, perception, learning, motivation, personality and lifestyle. The unique aspects of groups and organizational buyers will also be examined.
CR: the former BUSI 5200, Business 3240
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
3310 Organizational Behaviour (formerly BUSI 2301 and 4300) focuses on the study of individual and group processes in formal organizations. The student is introduced to the nature of work, the systematic approach to the study of behaviour, organizational roles and socialization, motivation, leadership, communication, and group dynamics.
CR: the former BUSI 2301 and the former BUSI 4300; Business 2300
PR: English 1110 or 1021
3401 Operations Management teaches fundamental concepts, methods, tools, and techniques to understand, analyze, and effectively manage as well as improve operations in business organizations. The course covers operations competitiveness and strategy, productivity, forecasting, capacity planning, material requirements planning, waiting lines analysis, project management, inventory management, quality control and its improvement, and supply chain management.
CR: the former BUSI 5400, Business 3410
PR: Statistics 2500, and BUSI 2400 or the former BUSI 2401
3610 Regulatory and Taxation Issues for Small Business (same as the former BUSI 7610) is designed to provide students with a general knowledge base of the various tax and other regulatory issues that should be considered in starting a business. The role that tax plays in decision making will be examined as well as the types of corporate funding to establish a new business through government grants, conventional loans and tax credits as provided under the Income Tax Act. Alternative corporate structures will be examined as well as aspects of employee compensation and business valuations. Practical aspects of starting your own business, such as registration requirements, will also be examined. This course is designed for non-accounting students.
CR: the former BUSI 7610
PR: BUSI 1101
3630 Venture Creation (same as the former BUSI 5600) covers the business creation process from the idea conception stage to the launch stage. Students learn how to search for, screen and evaluate opportunities,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
and to plan and assemble the required resources, including the preparation of an actual business plan. Alternatives to new venture creation, such as purchasing an existing business and purchasing a franchise, are also explored. Extensive group work is required.
CR: the former BUSI 5030, the former BUSI 5600, the former BUSI 7030
PR: completion of at least 45 credit hours
3700 Information Systems examines the operational and strategic importance of information systems in organizations. Topics include: types of systems; business requirements and information systems planning; approaches to acquiring information systems; managing information systems resources; and ethics, security and privacy issues in information management.
CR: the former BUSI 3701
PR: BUSI 1000, and English 1110 or English 1021
399W Work Term I (see description in Work Term Descriptions and course title section below.)

4000 Business Law I (formerly BUSI 3000) is a course dealing with the law relating to certain aspects of business activity; includes introductory material on the nature of law and legal processes, together with a detailed study of certain aspects of the law of contract, examination of the general principles of the law of agency as they affect business operations; introduction to selected topics in company and partnership law.
CR: the former BUSI 3000, Business 3030
4050 Strategic Management 1 introduces students to the strategic management approach. The course builds upon the knowledge and concepts developed in Business 1000 and prepares students for later business courses in their programs, especially Business 7000. Through experience and analysis in and of real or reality-based situations and issues, students will develop critical and integrative thinking and information literacy. Activity and action components of the strategic management process are the basis for student learning. The purpose of this course is to recognize the importance of situational analysis and strategy in the management process, including business functional and organizational integrative thinking, and decision-making regarding courses of action, resource allocation, and leadership.
CO: BUSI 4000 and 4330
CR: Business 4010
PR: BUSI 1600, BUSI 2010, BUSI 2101, BUSI 2210, BUSI 2400,BUSI 3310, BUSI 3401, BUSI 3700

4320 Human Resource Management introduces the student to the design, operation and management of HRM processes, their evaluation, and their contribution to employee and organization effectiveness. The principal processes considered are staffing, development, employment relations, and compensation. Consideration of the influence of relevant organizational and external conditions on HRM is included. The course views the management of human resources as the joint responsibility of line and HRM managers.
CR: Business 3300
PR: BUSI 3310 or the former BUSI 2301
4330 Introduction to Labour Relations (formerly BUSI 3320) provides an introduction to the field of industrial and labour relations in Canada, with primary emphasis on the labour-management relationship. Students will be introduced to the basic elements of an industrial relations system, including the participants, their roles and relationships, the social, economic, legal and political environment in which the participants interact, and the process and outcomes of collective bargaining. Students may be exposed to various role playing exercises that are applicable to industrial and labour relations.
CR: Business 3320
PR: English 1110 or English 1021
4500 Financial Management $I$ is designed to introduce the student to the role of financial management in business, financial analysis techniques, working capital management, and long-term and short-term financing.
CR: Economics 3160, the former BUSI 4110, Business 3500
PR: BUSI 1101, Statistics 2500, and Economics 1010 (or the former 2010)
450W Business Methods in Practice I (see description in Comprehensive Case Analysis Descriptions and course title section below.)

499W Work Term 2 (see description in Work Term Descriptions and course title section below.)
5000 Business Law II is designed to show the student how principles of Law are applied to four areas of Business. The areas dealt with in this course are accounting/finance, marketing, personnel and production.
CR: Business 4030
PR: BUSI 4000
5020 Topics In Resource-Based-Industries Management enables students to engage with resource-based industry companies and agencies through an Integrated working knowledge of the sector and its operations. Topics include: an overview of the oil and mining industries, regulation, social license concerns, human resources issues, procurement, and contracting. The course provides opportunities for student Involvement with Industry leaders and events through the use of guest speakers.

PR: BUSI 4050
5160 Cost Accounting (formerly BUSI 7100) deals with the use of accounting data for decision making. Topics covered include: cost estimation, pricing, joint costs, advanced variance analysis, total quality management, just-in-time, decentralization, transfer pricing, performance evaluations, activity based accounting, and backflush costing.
CR: the former BUSI 7100
PR: BUSI 2101 with a grade of at least $60 \%$
5210 Marketing Communications (formerly BUSI 6210) provides a theoretical background on the nature, role and principles of marketing communications; and develops analytical and decision-making skills in planning, executing, evaluating and controlling marketing communications campaigns.
CR: the former BUSI 6210
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
5217 Professional Selling provides a detailed introduction to and application of the principles of personal selling. The course introduces the basic concepts of professional selling, including customer analysis, communication skills, effective openings and closings, and customer relations. Selling skills and concepts are developed through the extensive use of sales exercises, role-plays and presentations.
CR: the former BUSI 6220
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
5220 Marketing Research (formerly BUSI 6200) is designed to acquaint the student with the use of marketing research as an aid to management. This is a comprehensive survey of the scope and methods of marketing research.
CR: the former BUSI 6200, Business 4210
PR: Statistics 2500, BUSI 2010, and BUSI 2210 or the former BUSI 2201
5250 Business and Industrial Marketing (formerly BUSI 7250) presents a comprehensive view of business markets, including industrial, institutional, and government markets. There is a balanced focus on strategy development and implementation. Particular attention is given to organizational buying behaviour, relationship management, global competitiveness, and the marketing of new high technology products and services.

CR: the former BUSI 7250
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
5301 Organizational Theory (formerly BUSI 5300) focuses on the organization, its environment, and its subsystems. From providing a basic appreciation of the role and practice of research in organizations, study extends to measures of organizational effectiveness, determinants of structure and design, power and politics, intergroup conflicts and conflict resolution, and organizational development and change.
CR: the former BUSI 5300, Business 3010
PR: BUSI 3310 or the former BUSI 2301
5302 International Business (formerly BUSI 7302) is designed to introduce students to the issues of international business: these are the processes of cultural confrontation and compromise; the problems of competitive sovereignty involving multinational corporations and the governments of host societies; the organization, structure, operation and control of diverse international businesses; and, finally, the role of multinational enterprise as a catalyst in economic development and resource employment, in particular, the North-South context. The relevance of international business as an area of study to the Canadian economy is discussed. The course is both conceptual and empirical in content.
CR: the former BUSI 7302, Business 4040
PR: BUSI 1000, Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020)
5401 Linear Optimization and Extensions I: Applications is more complex linear optimization models. Emphasis will be on formulation and computer-based sensitivity analysis, applications to other fields of business, cases in linear optimization and related fields.
PR: BUSI 2400 or the former BUSI 4401, and Statistics 2500
5402 Linear Optimization and Extensions II: Algorithms include the simplex and revised simplex algorithms, sensitivity analysis and duality, goal optimization, advanced formulation of $0 / 1$ models, branch and bound algorithm, network models: assignment, transportation, transshipment, shortest path, critical path, minimal spanning tree, and maximal flow.
PR: BUSI 2400 or the former BUSI 4401, and Statistics 2500
5500 Financial Management II (formerly BUSI 7140) is an extension of BUSI 4500. Capital investment decision-making using discounted cash flow methodology; investments under certainty; financial structure and leverage; analysis of money and capital markets; further examination of long-term external financing.
CR: the former BUSI 5140, the former BUSI 7140, Business 3510
PR: BUSI 4500 or the former BUSI 4110
5530 Public Finance - inactive course.
5700 Information Systems Analysis and Design provides students with
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
the skills to identify business problems which may be solved using information technology, determine requirements for information systems (IS) solutions, and develop detailed designs which form the basis for implementing systems. Topics may include: role of the user in systems development, systems development life cycle, requirements analysis and conceptual modelling, structured analysis and design, and trends in systems development methodologies. The importance of CASE tools in modern systems development will be emphasized through hands-on exercises.
PR: BUSI 3700
5701 Information Systems Development - inactive course.
5702 Business Models and Strategy of Electronic Commerce (formerly BUSI 6027) examines business concepts, social issues, and technology issues related to e-commerce, as well as providing an introduction to current practices, opportunities and challenges in implementing e-commerce solutions. Topics include: business models associated with web-based commerce; security, privacy, and intellectual property issues; payment and distribution systems; internet marketing; and strategic and planning issues.
CR: the former BUSI 6027
PR: BUSI 3700
5703 Information Security, Privacy, and Ethics - inactive course.
599W Work Term 3 (see description in Work Term Descriptions and course title section below.

6000-6029 (Excluding 6001, 6004, 6008, 6009, 6010, 6012, 6021, 6022, 6024 and 6027) Special Topics will have the topics to be studied announced by the Faculty.

6010 Strategic Management of Technology and Innovation is designed to explore the strategic management of technology and Innovation for improving competitiveness and for business development. This will include market-strategy technology connections, and technical innovation/new product development processes. Technology and technical innovation are viewed as fundamental to strategic competitiveness and business development as important elements of the management of strategic change in the business firm. In approaching technical innovation as strategic implementation, business environmental, organizational capability, human resources and management factors will be discussed.
PR: BUSI 3700, BUSI 4000, BUSI 4050, BUSI 4320, BUSI 4330, BUSI 4500, and BUSI 5301
6040 International Business Law develops the skills a business student must have in understanding the laws and regulations that exist and relate to international business decision making. The course will equip students with a knowledge and understanding of laws and regulations that currently prevail in international business operations.

## PR: BUSI 4000

6041-6060 Special Topics Courses will have the topics to be studied announced by the Faculty.
6100 Intermediate Accounting I continues the study of financial accounting by focussing on specific topics such as current assets, long-term investments, capital assets, intangibles, current liabilities, and long-term liabilities. Emerging issues in accounting will also be covered.
CR: Business 3100
PR: BUSI 1101 with a grade of at least $60 \%$
6110 Intermediate Accounting II is designed to integrate the principles, concepts and skills acquired in previous accounting courses and to enhance the student's analytical and decision-making capabilities. The course will focus on specific topics related to deferred taxes, employee future benefits, shareholders' equity, and financial statement presentation. The skills acquired in earlier courses will be integrated for purposes of interpreting and analysing financial information.
CR: Business 3110
PR: BUSI 1101 with a grade of at least $60 \%$
6120 Taxation I is a determination of the federal and provincial income tax liability of individuals including succession and estate planning for individuals, and legal form and structures under the Income Tax Act.
CR: Business 3120
PR: BUSI 1101 or the former BUSI 3100, and BUSI 4000
6130 Auditing introduces the student to the practice of auditing and to stress the auditor's decision-making process when determining the nature and amount of evidence the auditor should accumulate. Specific topics to be covered include the auditor's legal liability, materiality, internal control, transaction cycles, and audit of information processed through electronic data processing systems.
CR: Búsiness 4130
PR: either BUSI 6100 with a grade of at least $60 \%$ or BUSI 6110 with a grade of at least 60\%

6217 Salesforce Management examines the elements of an effective salesforce as a key component of the organization's total marketing effort. The course will apply theory relating to salesforce management from a
manager's point of view. Topics include the sales process, the relationship between sales and marketing salesforce structure, territory design, use of technology to improve salesforce effectiveness, and issues in recruiting, selecting, training, motivating, compensating and retaining salespeople.
CR: the former BUSI 6220
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
6230 Services Marketing is intended to examine the marketing of services and the role of services in supporting the marketing of tangible products. The distinction between the marketing of tangibles and intangibles will be stressed. The course will identify and examine the distinct issues which are encountered in the marketing of services and will explore appropriate strategies for implementing services marketing programs, primarily in services organizations, including health care, transportation, telecommunications, education, etc. Specifically, the course will examine in detail the role of people in delivering services, the importance of service quality as a strategic differentiating tool, and the importance of collaboration between marketing and human resources management in the delivery of services.
CR: Business 3220
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
6241 Digital Marketing is designed to acquaint students with Internet and other electronic based marketing efforts. It addresses the use of the Internet as a digital channel and communications medium.
CR: the former BUSI 6004 and the former BUSI 6240
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
6250 Retailing Management (formerly BUSI 7210) provides an integrative examination of the activities involved in marketing goods and services directly to the ultimate consumer. Specifically, the following areas will be examined within a managerial framework: the evolution of retailing; retailing within the marketing channel; market analysis and planning; shopping behaviour; image and retail advertising; trading area and site analysis; store layout; shelf space utilization; merchandising; and the future prospects for retailing.
CR: the former BUSI 7210
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
6301 New Directions in Organizational Behaviour provides an opportunity for students to explore and to develop their interests in topics in a dynamic field. Topics will be selected according to current emphases in the organizational behaviour literature.
PR: BUSI 3310 or the former BUSI 2301, and BUSI 5301
6310 Advanced Human Resource Management reinforces the applied aspects of theory covered in BUSI 4320 by examining approaches to (a) the avoidance of lawsuits, arbitration and performance-related problems which could result from the lack of both due process and effective policies and procedures, and (b) processes for the management of contemporary issues in Human Resource Management. Topics include problem solving in the areas of promotion policy, performance appraisal, test validation, training and development, compensation, job evaluation and pay equity, wrongful dismissal, occupational health and safety, absenteeism, substance abuse and AIDS. Students will examine cases and other material involving workermanagement conflict in the above areas and seek to relate these to the legal, ethical and behavioural foundations of Human Resource Management in both unionized and non-unionized settings.
PR: BUSI 4320
6311 International Human Resources Management develops the skills a business student must have in understanding the processes and practices of international human resource management (IHRM) for a successful managerial career. The course will equip students with a solid knowledge and understanding of human resource functions and practices that currently prevail in global/international business operations.

## PR: BUSI 4320

6312 Employee Recruitment and Selection (formerly BUSI 6022) is a critical factor in creating high performance work systems. This course examines the role of selection in HRM, legal issues, measurement, selection criteria, job competencies, testing, and interviewing, and making the employment decision.
CR: the former BUSI 6022, Business 4310
PR: BUSI 4320
6320 Advanced Labour Relations provides advanced level treatment of the field of industrial and labour relations in Canada, with primary emphasis on the labour-management relationship. Emphasis is placed on understanding recent problems/issues in industrial and labour relations and the range of options available for resolving these same problems. Topics examined may include: industrial relations theory; labour law reform; union growth and structure; management strategy; the role of third parties; workplace innovations; alternative dispute resolution mechanisms; union impact; public sector labour relations; comparative industrial relations; etc. Students may be exposed to various role playing exercises that are applicable to industrial and labour relations.
PR: BUSI 4330 or the former BUSI 3320
6330 International Labour Relations (same as the former BUSI 6024)

[^1]aims to place Canadian industrial relations in an international context by studying industrial relations in a number of different countries, bearing in mind the challenges faced by practitioners and policy makers arising from globalization and the information age. The review includes a selection of long established industrialized countries as well as later industrializing countries.
CR: the former BUSI 6024
PR: BUSI 4330
6400 Advanced Management Science provides advanced level treatment of special topic(s) in Management Science, such as, waiting lines, stochastic dominance, stochastic dynamic programming, etc. The topic(s) to be covered in any particular year will be chosen by the Instructor and may vary from year to year.
PR: BUSI 5401 or BUSI 5402
6410 Logistics Management will focus on transportation, location, procurement and distribution aspects of logistics management, within local and global settings. A number of classical and latest models related to the focus areas would be introduced, and some real-life case examples discussed. The focus is on modes of transportation, transportation management, facility location, procurement and supplier selection, distribution strategies, and global logistics.
PR: BUSI 2400, 3401, Statistics 2500
6415 Supply Chain Management is about the management of the processes, assets, and flows of material and information required to satisfy customers' demands. In this course, a few important supply chain drivers will be identified and investigated in details such as inventory, information and pricing. Those drivers determine the performance of a supply chain. The understanding of these key drivers and their inter-relationships with strategy and other functions of the company are really crucial in the management of any supply chain.
CO: BUSI 3401, 3700
PR: BUSI 2400, 3401, 3700, Statistics 2500
6510 Investments (formerly BUSI 6140) is a study of investment securities, risks, markets and mechanics; an appraisal of the economy, the industry and the firm; and portfolio management for personal and institutional investments.
CR: the former BUSI 6140, Business 4510
PR: BUSI 4500 or the former BUSI 4110
6550 International Finance examines the additional risks and profitable opportunities that arise for the firm when it extends its operations into international markets. Specific topics will include the determination of exchange rates, the international monetary system, balance of payments, the foreign exchange market, international money and capital markets, the parity conditions, accounting exposure, economic exposure, transactions exposure, political risk, and global financing. Knowledge of these topic areas will give further understanding with respect to operating within the constraints of the international marketplace.
CR: the former BUSI 6008
PR: BUSI 4500 or the former BUSI 4110
6605 Small Business Consulting introduces students to the nature of business consulting and the challenges associated with growth in small firms. The course draws upon knowledge from various functional areas and emphasizes complex and interdisciplinary applications of this knowledge in a real-world environment. Topics include models of the consulting process, problem diagnosis, managing the client relationship, research design, document preparation and ethics in consulting. Working in teams students will undertake a problem-solving project for a local organization. Students will not be permitted to register for the course after the first day of classes.
AR: attendance is required
PR: BUSI 4000, BUSI 4050, BUSI 4330, BUSI 5301
6610 Small Enterprise and Regional Development (formerly BUSI 7031) explores the potential and constraints on efforts to foster small enterprise formation and expansion as a means to promote regional economic development. It critically examines government initiatives to promote small business as the panacea for depressed regional economies, and reviews changes in the global economy and the organization of production which may enhance small business competitiveness. Both Canadian and international cases are studied, with theoretical and empirical findings related to the Newfoundland context.
CR: the former BUSI 6009, the former BUSI 7031
6700 Data Management is based on the premise that data is a valuable resource which needs to be managed effectively to provide accurate, complete, timely, relevant, and accessible information to support decision making. Topics may include: enterprise data modelling, logical database design, database management systems, query languages, transaction management and concurrent access, and security.
PR: BUSI 3700 or the former BUSI 6300

## 6701 Information Technology Management - inactive course.

7000 Strategic Management 2 emphasizes concepts of strategic management and strategy in various contexts and situations covering
corporations and businesses, and other institutions or organizations and their purposeful activities. Through in-depth analysis of reality-based situations and strategic issues, students will develop their contextual and situational orientation, and further develop their applied, investigative critical thinking and information search skills. Further, students will be expected to develop an applied ability in the contextual and situational analysis of corporations/businesses and institutions/purposeful activities, and in corresponding strategy formulation and planning for strategy implementation. Student learning activities may be based on published business cases, decision-making and group dynamics exercises, business simulation exercises, and information search projects. Learning outcomes also may include research and information search methodologies and information literacy, and good writing.
CO: BUSI 5301
CR: Business 4010
PR: BUSI 4000, BUSI 4050, BUSI 4320, BUSI 4330, and BUSI 4500
7002 Strategic Management in the Music Industry develops a comprehensive approach for understanding the important, organization-wide issues involved in strategy making in the music industry. Using experiential learning activities, the course focuses on key trends in the music sector and considers the strategic actions needed to achieve successful positioning in the industry. Strategy implementation is also covered. Students will examine how organizational culture, structure, and control systems can be key instruments for realization of business and corporate strategies, leading to business sustainability.
CO: BUSI 5301, Music 4800
PR: BUSI 4000, BUSI 4050, BUSI 4320, BUSI 4330, BUSI 4500, and
admission to the Joint Degrees of Bachelor of Business
Administration and Bachelor of Music program
7005 International Strategic Management (same as the former BUSI 6012) examines corporate strategy and strategic management in enterprises whose interests extend across national boundaries. International business managers and consultants must be able to formulate business strategy in environments that are affected by different politics, cultures, laws, economics, among other factors. The adept international business strategist will have a competitive edge if able to be at home in looking at international issues through a multidisciplinary prism. This course strives to help students to develop such an edge by providing an opportunity to acquire the knowledge and skills necessary to understand and make strategic decisions in the international business environment.
GR: the former BUSI 6012
PR: BUSI 5302
7010 Business and Society examines the inter-relationships among business, government, society and the environment. Topics include: the social-economic business system, business ideologies, social responsibilities of business, business ethics, stakehold and issues management, and selected current issues in business.
CR: Business 4020
PR: BUSI 5301
7110 Accounting Theory - inactive course.
7120 Advanced Financial Accounting covers specific topics such as longterm investments, consolidated financial statements, joint ventures, segmented financial information, and fund accounting.
PR: BUSI 6100 with a grade of at least $60 \%$ and BUSI 6110 with a grade of at least $60 \%$

7125 Accounting Capstone is a capstone course designed to prepare students to pursue a Canadian professional accounting designation. Students will be introduced to foreign currency transactions and translation, corporate income tax issues, and integrated case analysis and will further develop financial reporting, income tax, and auditing competencies.
CO: BUSI 7120
PR: BUSI 6100 with a grade of at least $60 \%$, BUSI 6110 with a grade of at least $60 \%$, BUSI 6120 with a grade of at least $60 \%$, BUSI 6130 with a grade of at least 60\%

## 7150 Taxation II - inactive course.

7160 Advanced Topics in Managerial Accounting introduces the student to an in-depth study of advanced qualitative and quantitative methodology available to the managerial accountant. The application of mathematical models and behavioural theories to realistic challenges faced by various fiscal entities will be stressed. Class instruction will include the use of cases and rely heavily on a multidisciplinary approach towards solving the unstructured problem.
PR: BUSI 5160 with a grade of at least $60 \%$
7218 Customer Relationship Management (CRM) (formerly BUSI 6218) is the evolution and integration of marketing ideas, data, technology, and organizational factors. Relying on the integration of people, processes, and marketing capabilities and facilitated by information technology, effective CRM optimizes the identification, acquisition, growth, and retention of desired customers. The history of CRM and the benefits and challenges of its implementation in business and consumer markets are addressed. The course culminates in the student's creation of a CRM strategic plan.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

CR: the former BUSI 6218
PR: BUSI 2010, BUSI 5220, and BUSI 2210, or the former BUSI 2201
7230 Marketing Management is designed to integrate the principles, concepts and skills acquired in previous marketing courses and to enhance the student's analytical and decision-making capabilities with regard to developing marketing strategies. The course will focus on: market analysis, marketing planning, the strategic decisions to be made within the framework of the marketing mix (product, price, promotion, and distribution); and the control systems related to the marketing program. The use of market research and knowledge from other functional areas of the organization (accounting, finance, economics, etc.) will be considered throughout the course.
PR: BUSI 2010, BUSI 3210 or the former BUSI 5200, BUSI 4500, and BUSI 5220

7240 International Marketing provides an understanding of the effects that the international dimension has upon the strategies and management of the marketing efforts of the firm. In particular, the student is introduced to the analysis techniques of the various environments that constitute a country analysis. Entry strategies are discussed with an emphasis upon the export process. Finally, the standardization/adaptation question is discussed in the context of each element of the marketing mix.
CR: Business 4230
PR: BUSI 2010, and BUSI 2210 or the former BUSI 2201
7310 Seminar in Human Resource Management seeks to integrate policies, procedures and methods covered in BUSI 6310 with other functional areas which impact upon the management of Human Resource Systems. Stakeholder assumptions about: work-force characteristics; management philosophy; business strategy; labour markets; laws and society; task technology and unions will be examined via a combination of cases, readings, research, peer discussion and dialogue with guest speakers.
PR: BUSI 4320
7315 Human Resource Management Training exposes students, through a variety of methods including lecture, discussion, case analysis, research, and the development of a detailed training program, to many topics in the area of human resource management training; including: needs analysis, training design, on and off-the-job training methods, technology and training, training implementation and delivery, transfer of training, and training evaluation.
CR: the former BUSI 6021
PR: BUSI 4320
7320 Collective Agreement Administration and Arbitration provides advanced coverage of the substantive and procedural rights of employers, unions and employees under collective agreements, and the means by which disputes over these rights are resolved through the grievance arbitration process. Topics examined include: the legal framework and place of grievance arbitration in the industrial relations system; the nature and scope of the arbitrator's role; preparation for and conduct of arbitration hearings; arbitral jurisprudence; alternative dispute resolution processes; and the development of a sound labour relations climate. Students will undertake extensive reviews of labour arbitration cases and will examine the impact of jurisprudence on the philosophy and practice of management in the private and public sectors. Students may be exposed to various role playing exercises that are applicable to industrial and labour relations.
PR: BUSI 4000 and BUSI 4330

## 7321 Dispute Settlement in Labour Relations - inactive course.

7322 Labour Law provides an overview of laws regulating the employment relationship in Canada, including the common law, general employment and collective bargaining laws, and the Charter of Rights and Freedoms. Emphasis is placed on the law of collective bargaining in the private sector, including the acquisition and termination of bargaining rights, unfair labour practices, the duty to bargain, industrial conflict and the administration of the collective agreement.
PR: BUSI 4000 and BUSI 4330
7330 Organizational Development - inactive course.
7400 Simulation in Management emphasizes the use of simulation modeling technique to study and analyze management systems. Generally, simulation is considered as an experimental technique and is used in problem situations whose complexity precludes the use of analytical problem solving techniques. Topics to be covered include: simulation methodology, model building, developing and building simulation models, simulation languages, generation of random numbers, and simulating a business system. Computers and case studies will be used to study various applications of simulation in Business.
PR: : BUSI 5401 or BUSI 5402
7410 Project Management introduces appropriate methodology and theory for selecting, planning and managing projects. This includes the project portfolio selection, the initial creation of a plan in terms of the breakdown of the tasks, construction of the relationships and dependencies inherent in any plan, and controlling the execution of the activities according to the plan as
the project proceeds. Emphasis will be placed on resource allocation, leveling and management, critical path analysis, risk analysis, accounting for uncertainties and time-cost trade offs. The role of the project manager and project team as well as issues related to multi-project management will also be addressed
PR: BUSI 2400, 3401, Statistics 2500
7415 Managing Business Process Flows employs a logical, rigorous approach to studying the fundamentals of business processes. This approach is based on modeling business process and its flows, studying causal relationships between the business process and its performance, and formulation implications for managerial action by determining business process drivers and their impact on process management and performance. The focus is on business process flow, capability, productivity, variability, control, improvement, risk sharing and management, coordination and integration.
PR: BUSI 2400, 3401, 3700, Statistics 2500
7500 Advanced Finance (formerly BUSI 7130) examines advanced developments in finance. Several topics will be selected, researched and discussed. These topics shall vary as financial practices change.

## CO: BUSI 6510

CR: the former BUSI 7130
PR: BUSI 5500
7510 Options and Futures (formerly BUSI 7170) is an extension of BUSI 6510 Investments which will introduce the student to the workings of the options and futures markets. Specific topics will include the institutional structure of the markets, option pricing, strategies such as straddles and spreads, hedging, spot/forward/futures markets, speculation, risk transference and market efficiency considerations.
CR: the former BUSI 7170
PR: BUSI 6510 or the former BUSI 6140
7600 Current Topics in Entrepreneurship (formerly BUSI 7032) endeavours to address recent research findings in various aspects of entrepreneurship. Students will have the opportunity to pursue issues in entrepreneurship development covering a wide range of topics using publications, journals and conference proceedings.
CR: the former BUSI 7032
PR: the former BUSI 5600
7700 Strategic Information Systems - inactive course.
7701 Current Topics in Information Systems - inactive course.

### 10.3 Work Term Descriptions

The following work terms are a requirement of the Bachelor of Commerce Co-operative program only.
The objectives of the Work Term component of the Business Administration Co-operative Program are embodied in the Work Term descriptions below. The descriptions serve to guide the student and employer toward achieving these objectives and to guide Business Co-operative Education and the Faculty of Business Administration in monitoring and evaluating each student's progress.
399W Work Term I follows the successful completion of Academic Term 3. For most students, it represents their first professional work experience in a business environment and as such represents their first opportunity to evaluate their choice of pursuing a career in business administration. Students are expected to learn, develop and practice the high standards of behaviour and performance normally expected in the work environment. (A detailed description of each job is normally posted during the job competition.)
As one component of the work term, the student is required to complete a work report. The work report, as a minimum requirement should

- analyse an issue/problem related to the student's work environment,
- demonstrate an understanding of the structure of a professional report, and
- show reasonable competence in written communication and presentation skills. Students should consult UNIVERSITY REGULATIONS - Good Writing, and the evaluation form provided in the placement package
Note: Students shall not conduct primary research as part of the Work Report.


## PR: BUSI 300W

499W Work Term 2 follows the successful completion of Academic Term 4. Students are expected to further develop and expand their knowledge and work-related skills and should be able to accept increased responsibility and challenge. In addition, students are expected to demonstrate an ability to deal with increasingly complex work- related concepts and problems. Students should conscientiously assess the various business opportunities relative to their individual interests.
The Work Report, as a minimum requirement should
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

- analyse an issue/problem related to the student's work environment and demonstrate an understanding of business concepts relative to the student's academic background,
- demonstrate competence in creating a professional report, and
- show competence in written communication and presentation skills.

Note: Students are permitted to conduct primary research as part of the Work Report, when it is required to achieve the report's research objectives. If primary research is conducted as part of the Work Report, it must be conducted in accordance with all policies and regulations of the University and the Faculty of Business Administration, including Memorial University of Newfoundland's policy on ethics of research involving human participants (www.mun.ca/policy/site/policy.php?id=139).

599W Work Term 3 follows the successful completion of Academic Term 5. Students should have sufficient academic grounding and work experience to contribute in a positive manner to the management and problem-solving processes needed and practiced in the workplace. Students should become better acquainted with their discipline of study, should observe and appreciate the attitudes, responsibilities, and ethics normally expected of business managers and should exercise greater independence and responsibility in their assigned work.
The Communications Component should reflect the growing professional development of the student and, as a minimum requirement, the student will;

- demonstrate an ability to analyse a significant business issue/problem related to the student's experience in the workplace,
- demonstrate a high level of competence in delivering a professional oral presentation, and
- demonstrate a high level of competence in written communications. The Communications Component for Work Term 3 consists of an Oral Presentation on a workplace-related business issue/problem. The presentation should be of about seven minutes duration followed by a threeminute question period and will normally be given on campus in a formal setting after students have returned to Academic Term. A written Executive Summary is also required. Guidelines for the preparation and delivery of this oral presentation along with deadlines are provided in the Business Cooperative Education Handbook.


### 10.4 Comprehensive Case Analysis Description

The following course of study is an academic requirement of the * Diploma in Business Administration and does not carry academic credit.
450W Business Methods in Practice is a non-credit course in which each student will undertake an analysis of an assigned case. A written report is mandatory. Evidence of the student's understanding of various business methods and the ability to gather material relating to the report, analyse it effectively, and present it in a clear, logical and concise form, will be required in the report.
CH: 0
PR: approval of the Dean or delegate
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Dean
Anderson, K.D., B.Sc., B.Ed., M.Ed. Memorial, Ph.D. Toronto; Professor
Up-to-date personnel listings are available at www.mun.ca/educ/facultyStaff.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Mission Statement

The Faculty of Education is committed to improving the human condition through education. The Faculty is dedicated to leadership and exemplary practice in teaching and learning, research and scholarship, and public engagement in local and global communities.
Additional information regarding the Faculty of Education is available at www.mun.ca/edu, or by e-mail at muneduc@mun.ca, or by telephone to (709) 864-3403.
A student must meet all regulations of the Faculty in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS. For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/. For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

## 4 Student Responsibility Clause

The Office of Academic Programs, Faculty of Education, will assist students with questions or problems which may arise concerning their programs. It is, however, the responsibility of students to see that their academic programs meet the Faculty of Education and the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).

## 5 Teacher Certification

Teacher Certification is a Provincial responsibility. Students are advised to contact Teacher Certification in writing at Teacher Certification and Records, Department of Education, P.O. Box 8700, St. John's, NL, A1B 4J6, or by visiting the website at www.ed.gov.nl.ca/edu/k12/teaching/certification.html for advice regarding Teacher Certification Regulations.

## 6 Registration in Education Courses

### 6.1 For Non-Education Students

Registration in Education courses is normally restricted to those students who have been admitted to a degree or diploma program in the Faculty of Education. A student in first year or a student in other Faculties or Schools who has completed not fewer than 24 credit hours may register for the following courses in Education without acceptance to a program when space is available: 2040, 2050, 2222, 2800, 2803, 3210, 3211, 3565, 3570, 3571, and 3660.
Such a student is advised to consult degree or diploma regulations to determine which, if any, of the above courses can be applied to the student's program.

### 6.2 For Teacher Certification Upgrading and the Post-Secondary Instructors Certificate (as issued by the Government of Newfoundland and Labrador)

A student who has completed a degree program in Education, or equivalent, who wishes to register in Education courses for certification upgrading purposes and a student requiring Education courses for the Post-Secondary Instructors Certificate should contact the Office of Academic Programs at least one month in advance of registration for permission and procedure.

## 7 Description of Programs

The admission/readmission regulations and the program regulations for each degree and diploma program listed below can be found at Admission/Readmission Regulations for the Faculty of Education and the Program Regulations, respectively.
All courses of the Faculty are designated by ED.

## Important Notice

The Bachelor of Education (Native and Northern) program is no longer available for admission. Students previously admitted to the Bachelor of Education (Native and Northern) program and in good standing, must complete all program requirements by December 31, 2019. Students must follow the Calendar regulations for the Academic year in which they were admitted. Memorial University of Newfoundland Calendars by Academic year can be viewed at www.mun.ca/regoff/calendar.php. Students are advised to contact the Office of Academic Programs, Faculty of Education by telephone to (709) 864-3403 or by e-mail at muneduc@mun.ca, for course selection and planning.

### 7.1 General Degree Programs

The Faculty of Education offers ten general degrees and one diploma program.

1. The Bachelor of Education (Intermediate/Secondary) is a 51 credit hour second degree program designed to prepare teachers of grades 7-12. The program is offered in a three semester ( 12 month), full-time format, and commences in the Fall semester of each year.
2. The Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education is a 69 credit hour second degree program designed to prepare both Intermediate/Secondary and Technology Education teachers. The program is offered in a four semester (16 month), full-time format and commences in the Spring of each year. A student in the program will complete courses that address the development of basic skills and competencies in a variety of technological areas and how to apply them through design and problem solving processes in a school classroom/laboratory setting.
3. The Bachelor of Education (Post-Secondary) as a First Degree is the equivalent of a 120 credit hour degree program designed to prepare students for a variety of instructional and leadership roles in formal and informal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.
4. The Bachelor of Education (Post-Secondary) as a Second Degree is a 36 credit hour second degree program designed to prepare students for a variety of instructional and leadership roles in informal and formal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education. Students in this program come from diverse backgrounds including administrative, academic, adult education, business, health, literacy, policy, student services, and technical and trades professions. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.
5. The Bachelor of Education (Primary/Elementary) as a First Degree is a full-time, 150 credit hour degree program designed to prepare teachers for kindergarten through grade six. With the appropriate academic planning, a student can commence this Education program in the Fall semester of the third year of studies.
6. The Bachelor of Education (Primary/Elementary) as a Second Degree is a 72 credit hour program and is intended for students who have completed an appropriate Bachelor's degree. The program is offered in a two-year (September-June), full-time format, and commences in the Fall semester of each year. A 75 credit hour French as a Second Language Option is available and commences in August each year. The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information contact the Office of Academic Programs.
7. The Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education is an 85 credit hour integrated second degree program intended for students who have completed an appropriate Bachelor's degree. The program is designed for the preparation of K-6 classroom teachers with a focus on STEM education (science, technology, engineering, and mathematics). The program is offered in a two-year (September-May) full-time format, and commences in the Fall semester of each year. This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the Office of Academic Programs.
8. The Bachelor of Music Conjoint with Bachelor of Music Education is a 159 credit hour, five-year conjoint degree program offered in partnership with the School of Music. This program is designed for the preparation of K-12 music teachers, and other professionals in positions related to music education.
9. The Bachelor of Music Education as a Second Degree is a 45 credit hour degree program for students who have already been awarded a Bachelor of Music. This program is the same as the music education component of the conjoint program. The program is designed to prepare music teachers in all facets of school music education: foundations of music education; primary/elementary, intermediate/secondary classroom music; and choral and instrumental music education. The program consists of 30 credit hours of course work in music education and general foundational education and a 15 credit hour teaching internship.
10. The Bachelor of Special Education is a 36 credit hour second degree program designed for the preparation of Special Education teachers and is available through part-time or full-time study. This program is currently under review. For more information contact the Office of Academic Programs.

### 7.2 General Diploma Program

The Diploma in Adult Learning and Post-Secondary Education explores practices, principles, and theories in the field of adult learning. This diploma program is designed to prepare graduates for instructional and professional roles in adult education settings such as community agencies, not-for-profit organizations, and community development programs.

## 8 Admission/Readmission Regulations for the Faculty of Education

The program regulations for each degree and diploma program listed below can be found at Program Regulations.
In addition to meeting UNIVERSITY REGULATIONS, an applicant must meet the Admission/Readmission Regulations for the Faculty of Education below and the Admission/Readmission Regulations for the program of admission/readmission.

1. Admission to degree and diploma programs within the Faculty of Education is limited, selective and highly competitive. Meeting minimum admission requirements does not guarantee acceptance to a program. The Faculty reserves the right to limit the number of spaces available in each program. When the number of eligible applicants exceeds the number of spaces available in a particular program, preference may be given to applicants who are permanent residents of Newfoundland and Labrador.
2. At least three positions per year are available in Education programs for applicants of Aboriginal ancestry who have met the admission requirements. Applicants must submit a letter of request with the Faculty application and provide documentation of Aboriginal ancestry.
3. The application for admission or readmission to programs offered by the Faculty of Education is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.manchu/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. Transcripts from institutions other than Memorial University of Newfoundland and any other supporting documents required must be sent to the Office of the Registrar in accordance with the deadlines specified for each program in the Application Deadline Dates table below. Applications received later than the stated deadline dates will be processed as time and resources permit.

Application Deadline Dates

| Program | Commencement Date | Application Deadline |
| :--- | :--- | :--- |
| Bachelor of Education (Intermediate/Secondary) | Fall | January 15 |
| Bachelor of Education (Intermediate/Secondary) Conjoint with the <br> Diploma in Technology Education | Spring | January 15 |
| Bachelor of Music Education - first and second degree | Fall | January 15 |
| Bachelor of Education (Post-Secondary) - first and second degree | Fall <br> Winter | September 15 |
| Bachelor of Education (Primary/Elementary) as a First Degree | Fall | January 15 |
| Bachelor of Education (Primary/Elementary) as a Second Degree <br> The Grenfell Campus offering of this program is currently under <br> review and may not be available for intake at this time. For further <br> information contact the Office of Academic Programs. | Fall | January 15 |
| Bachelor of Education (Primary/Elementary) as a Second Degree <br> Conjoint with Certificate in STEM Education | Fall | January 15 |
| Bachelor of Special Education | Fall | January 15 |
| Diploma in Adult Learning and Post-Secondary Education | Fall | Winter |

4. Admission to programs within the Faculty of Education is determined by a Selections Committee and is based on the criteria listed for each degree/diploma program. An applicant who is completing courses at this or another institution and for whom final and complete transcripts are not yet available may be granted provisional acceptance to the program to which the applicant is applying pending the receipt of final transcripts. This provisional acceptance will remain valid until final transcripts are received. Deadline for receipt of final transcripts is June 15th. A provisionally accepted applicant may be granted a final acceptance upon review of the final transcript by the Selections Committee. The Faculty reserves the right to deny admission to an applicant who, in the opinion of the Selections Committee, is deemed unsuitable for admission to a program.
5. A student who has been admitted to a program in the Faculty of Education requiring a teaching internship is advised that the student may be assigned to any Provincial school district and is responsible for all travel and accommodation costs associated therewith.
6. A student who has been admitted to a particular degree program offered by the Faculty of Education and who wishes to change to another degree program within the Faculty must submit a new Faculty application online within Memorial Self-Service at www5.manchu/admit/twbkwbis.P_WWWLogin that will be considered in competition with other applicants.
7. In special circumstances, the Committee on Undergraduate Studies, on recommendation from the Admissions Committee may, at its discretion, consider an applicant or group of applicants as an exception to the requirements.
8. A student who declines an offer of admission to the Faculty of Education, withdraws from the program, or who does not register for courses in at least one of the three semesters following admission must, if the student wishes to be subsequently considered for admission, submit a new application in competition with other applicants.
9. An unsuccessful applicant has the right to appeal the decision of the Admissions Committee not to offer the applicant a place, if it is felt by the applicant that the decision was reached on grounds other than those specified under the Admission/Readmission Regulations for the Faculty of Education. The appeal should be made in writing within twenty-one days of the notification of the decision and should be directed to the Dean of Education. The letter should state clearly and fully the grounds for the appeal. If the Dean of Education, in consultation with the Registrar, judges the grounds to be sufficient, the formal appeals mechanism will be initiated. Normally, appeals will only be considered in the case of procedural error and/or receipt of new information that is relevant to the application An applicant is advised to refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions section of the University Calendar.
10. The Faculty of Education does not require criminal record checks or other screening procedures as a condition of admission to programs. A student should, however, be aware that such record checks or other screening procedures are required by school districts/schools that host education students. Such agencies will not accept a student without a clear criminal record check or other screening procedure, which would prevent the student from completing a required component of the program. As a result, such a student may not be eligible for promotion or graduation.
It is the responsibility of the student to have such procedures completed as required and at the student's own expense. The Faculty of Education expects a student to provide evidence of a clear criminal record check before the student is assigned to a school.
The screening procedures of any given agency may change from time to time and are beyond the control of the University.
11. The letter of acceptance to the Bachelor of Education (Intermediate/Secondary), Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education, Bachelor of Music Education as a Second Degree, Bachelor of Education (Primary/Elementary) as a Second Degree, Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, and Bachelor of Education (Post-Secondary) as a Second Degree will give the successful applicant 14 days from the date of the letter of notification in which to confirm acceptance of the placement offer. The signed Accept/Decline Form indicating acceptance of the offer must be accompanied by a deposit of $\$ 150$ which will be credited towards tuition fees. The deposit will be forfeited if the applicant subsequently declines the offer or fails to register. If no reply is received within 14 days, the offer by the Faculty will be withdrawn and the applicant will be informed of this by letter.
12. Tran̂sfer credit cannot be awarded for either Education 3600 or Education 3650.

### 8.1 Bachelor of Education (Intermediate/Secondary)

1. For application deadlines refer to the Application Deadline Dates table. Consideration will be given to the courses for which an applicant is registered at the time of application. An applicant who will have completed all requirements for admission by the end of the Spring semester of the year that admission is being sought will be considered as time and resources permit. An applicant attending institutions other than Memorial University of Newfoundland must supply transcripts indicating Winter semester grades no later than June 15.
2. To be considered for admission to the Bachelor of Education (Intermediate/Secondary) degree program, an applicant must have:
a. been awarded a Bachelors Degree from a university recognized by Memorial University of Newfoundland;
b. completed 36 credit hours in a subject listed under Academic Disciplines for Bachelor of Education (Intermediate/ Secondary) below (Business Studies, Newfoundland and Labrador Studies, and Religious Studies cannot be used to satisfy the 36 credit hour requirement);
c. completed 24 credit hours in a subject listed under Academic Disciplines for Bachelor of Education (Intermediate Secondary) below but different from that in b. above; and
d. achieved an overall average of at least $65 \%$ in the courses chosen to meet b. and c. above.
3. Academic Disciplines are deemed to be the disciplines on the following list. Courses from other disciplines deemed by the Admissions Committee to be equivalent to courses in any of the listed Academic Disciplines for Bachelor of Education (Intermediate/Secondary) will be acceptable.

Academic Disciplines for Bachelor of Education (Intermediate/Secondary)

| Biochemistry | Biology | Business Studies An applicant who uses <br> Business Studies as an Academic <br> Discipline must have at least a minor in <br> Business Administration. |
| :--- | :--- | :--- |
| Canadian Studies |  | Earth Sciences |
| Economics | Chemistry | Environmental Science |

French - An applicant who uses French as an Academic Discipline must have written the DELF Tout Public (Level B2) and achieved an overall grade of at least $70 \%$, with no less than $60 \%$ in any one skill area of the exam. An applicant must also have completed at least eight weeks (first academic discipline) or at least four weeks (second academic discipline) at an approved Francophone institution in a French speaking area or have acquired equivalent work experience in a Francophone environment.

General Science - An applicant who uses General Science as an Academic Discipline may use courses chosen from the separate science disciplines in any combination from Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences or Physics but must complete a minimum of 12 credit hours in each separate science discipline used.

| Geography | History | Mathematics - may include Statistics |
| :--- | :--- | :--- | :--- |
| Newfoundland and Labrador Studies | Physical Education - In order to be considered for admission within this Academic <br> Discipline, an applicant must have completed courses in the following areas: Human <br> Anatomy, Human Physiology, Motor Learning, Biomechanics, Primary/Elementary <br> Physical Education Curriculum and Teaching, Issues and Trends in Physical <br> Education and a minimum of 15 credit hours in Physical Education activities. |  |
| Physics | Political Science | Religious Studies |
| Theatre Arts | Visual Arts |  |

The Academic disciplines of Religious Studies, Theatre Arts, and Visual Arts will only be offered every two years. For further information contact the Office of Academic Programs.
4. When calculating averages in the first and second teachable areas, no more than two 1000-level courses in each of the first and second teachable areas will normally be used.
5. A limited number of program spaces are allocated to each discipline. An applicant who is admitted with a particular Academic Discipline and who wishes to change to a different Academic Discipline must obtain permission of the Office of Academic Programs. Such changes may not be possible in particular areas.
6. An applicant is advised that admission to the program on the basis of academic disciplines is dependent on sufficient numbers of applicants to warrant the offering of applicable methodology courses in those disciplines in any given year.
7. An applicant who is registered in the final semester of the first Bachelor's Degree program during the Winter semester must have satisfied the academic requirements set out in Clause 2. above upon completion of the first degree program.
8. In assessing applications to the Bachelor of Education (Intermediate/Secondary) program, consideration will be given to the following:
a. average in each of the two academic disciplines;
b. overall academic performance; and
c. personal statement and references as outlined on the application to the Faculty.
9. Because of the structured, sequential nature of this program, a student must attend full-time. A student who drops any course which is part of the program will be dropped from the entire program.
10. A student who has been admitted to the program but chooses not to attend in the Fall semester of the year of admission will lose admission status. Such a student may reapply for admission at a later date, and must submit a new application which will be considered in competition with other applicants.

### 8.2 Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education

1. For application deadlines refer to the Application Deadline Dates table. Consideration will be given to the courses for which an applicant is registered at the time of application. An applicant attending institutions other than Memorial University of Newfoundland must supply transcripts indicating Fall semester grades no later than February 1.
2. To be considered for admission to the Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education program an applicant must have:
a. been awarded a Bachelors Degree from a university recognized by Memorial University of Newfoundland;
b. completed 36 credit hours in a subject listed under Academic Disciplines for Bachelor of Education (Intermediate/ Secondary) Conjoint with the Diploma in Technology Education in clause 3. below; and
c. achieved an overall average of at least $65 \%$ in the courses chosen to meet b. above.
3. Academic Disciplines for Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education are deemed to be the disciplines on the following list. Courses from other disciplines deemed by the Admissions Committee to be equivalent to courses in any of the listed Academic Disciplines for Bachelor of Education (Intermediate/ Secondary) Conjoint with the Diploma in Technology Education will be acceptable.

Academic Disciplines for Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education

| Biochemistry | Biology | Canadian Studiês |
| :--- | :--- | :--- |
| Chemistry | Earth Sciences | Economics |
| English | Environmental Science |  |

French - An applicant who uses French as an Academic Discipline must have written the DELF Tout Public (Level B2) and achieved an overall grade of at least $70 \%$, with no less than $60 \%$ in any one skill area of the exam. An applicant must also have completed at least eight weeks at an approved Francophone institution in a French speaking area or have acquired equivalent work experience in a Francophone environment.
General Science - An applicant who uses General Science as an Academic Discipline may use courses chosen from the separate science disciplines in any combination from Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics but must complete a minimum of 12 credit hours in each separate science discipline used.

| Geography | History | Mathematics - may include Statistics |
| :--- | :--- | :--- |

Physical Education - In order to be considered for admission within this Academic Discipline, an applicant must have completed courses in the following areas: Human Anatomy, Human Physiology, Motor Learning, Biomechanics, Primary/Elementary Physical Education Curriculum and Teaching, Issues and Trends in Physical Education and a minimum of 15 credit hours in Physical Education activities.

| Physics | Political Science | Theatre Arts |
| :--- | :--- | :--- |
| Visual Arts |  |  |

The Academic disciplines of Theatre Arts and Visual Arts will only be offered every two years. For further information contact the Office of Academic Programs.
4. When calculating the average in the 36 credit hours required under clause 2 . b. above, no more than two 1000 -level courses will normally be used.
5. A limited number of program spaces are allocated to each discipline. An applicant who is admitted with a particular Academic Discipline and who wishes to change to a different Academic Discipline must obtain permission of the Office of Academic Programs. Such changes may not be possible in particular areas.
6. An applicant is advised that admission to the program is dependent on sufficient numbers of students to warrant the offering of applicable methodology courses in those disciplines in any given year.
7. An applicant who is registered in the final semester of the first Bachelor's Degree program during the Winter semester must have satisfied the academic requirements set out in Clause 2. above upon completion of the first degree program.
8. In assessing applications to the Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education degree program, consideration will be given to the following:
a. average in courses in clause 2. b.;
b. overall academic performance; and
c. Personal statement and references as outlined on the application to the Faculty.
9. Because of the structured, sequential nature of this program, a student must attend full-time. A student who drops any course which is part of the program will be dropped from the entire program.
10. A student who has been admitted to the program but chooses not to attend in the Spring semester of the year of admission will lose admission status. Such a student may reapply for admission at a later date, and must submit a new application which will be considered in competition with those of all other applicants.

### 8.3 Bachelor of Education (Post-Secondary) as a First Degree

The Bachelor of Education (Post-Secondary) as a First Degree is designed to prepare students for a variety of instructional and leadership roles in formal and informal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education.

A number of the courses also form the basis for the Post-Secondary Instructor Certificate awarded by the Government of Newfoundland and Labrador.

1. For application deadlines refer to the Application Deadline Dates table. To be considered for admission to the Bachelor of Education (Post-Secondary) as a First Degree program, an applicant must meet, in addition to the general admission requirements of the University, the requirements outlined below:
a. the Diploma in Adult Learning and Post-Secondary Education; and
b. a program of study as verified by one of:

- a certificate of qualification as a journeyperson for a designated trade; or
- a certificate or diploma from a college, university, or school (vocational, technical, business); or
- satisfactory completion of a training program equivalent to bullet one or two above.

2. Advanced standing to a maximum of 30 credit hours may be awarded, upon admission, for training and work experience applicable to post-secondary education settings. Training and experience will be assessed by the Selections Committee for Post-Secondary Education. The work experience must be subsequent to the completion of, or concurrent with, the occupational training program.

### 8.4 Bachelor of Education (Post-Secondary) as a Second Degree

1. For application deadlines refer to the Application Deadline Dates table. To be considered for admission to the Bachelor of Education (Post-Secondary) as a Second Degree program, an applicant must meet, in addition to the general admission requirements of the University, the admission requirements as outlined below. Applicants must have:
a. been awarded an undergraduate degree from Memorial University of Newfoundland or from an institution recognized by Memorial University of Newfoundland with at least second class standing or equivalent; or
b. been awarded an undergraduate degree from Memorial University of Newfoundland or an institution recognized by Memorial University of Newfoundland and have successfully completed Education 2700, 2720 and 2801 with an average of at least $65 \%$.
2. In assessing applications to the Bachelor of Post-Secondary Education as a Second Degree, consideration will be given to the following:
a. academic performance as described above; and
b. personal statement and references as outlined on the application to the Faculty.

### 8.5 Bachelor of Education (Primary/Elementary) as a First Degree

1. For application deadlines refer to the Application Deadline Dates table.
2. Consideration will be given to the courses for which an applicant is registered at the time of assessment of applications. An applicant who has completed all requirements for admission by the end of the Spring semester of the year that admission is being sought will be considered as time and resources permit.
3. To be considered for admission, an applicant must have successfully completed 60 credit hours as outlined in Clauses a. - h. below with a cumulative average of at least $65 \%$ or an average of at least $65 \%$ on the last attempted 30 credit hours. The 60 credit hours are:
a. 12 credit hours in English including at least 6 credit hours at the 2000 level or above - ESL courses cannot be used to satisfy this requirement;
b. 6 credit hours in Mathematics or 3 credit hours in Calculus
c. 6 credit hours in Psychology;
d. the former Science 1150 and 1151; or 9 credit hours from 3 separate Science areas, 6 credit hours of which must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement. The science areas are: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics; or a Focus Area in Science;
e. 6 credit hours chosen in any combination from Anthropology, Archaeology, Economics, Folklore, Geography, History, Linguistics, Political Science, Religious Studies, Sociology;
f. 6 credit hours in French (recommended) or 6 credit hours in a single language other than English, or demonstration of equivalent competency in a second language;
g. 15 credit hours as part of a focus area as set out in Table 6 Focus Areas for Bachelor of Education (Primary/Elementary); and
h. additional credit hours from areas other than Education.
4. An applicant with French as a Focus Area must have written the DELF Tout Public (Level B2) and achieved an overall grade of at least $70 \%$, with no less than $60 \%$ in any one skill area of the exam.
5. In assessing applications to the Bachelor of Education (Primary/Elementary) as a First Degree program, consideration will be given to applicant's:
a. overall academic performance; and
b. personal statement and references as outlined on the application to the Faculty.

### 8.6 Bachelor of Education (Primary/Elementary) as a Second Degree

The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information contact the Office of Academic Programs.

1. For application deadlines refer to the Application Deadline Dates table.
2. Consideration will be given to the courses for which an applicant is registered at the time of assessment of applications. An applicant who has attended institutions other than Memorial University of Newfoundland must supply transcripts indicating Fall semester grades by February 1.
3. To be considered for admission to the Bachelor of Education (Primary/Elementary) as a Second Degree program, an applicant must have:
a. been awarded a Bachelor's Degree, or approved (prior to program startup) for the award of a Bachelor's Degree from a university recognized by Memorial University of Newfoundland;
b. achieved a cumulative average of at least $65 \%$ or an average of at least $65 \%$ on the last attempted 30 credit hours;
c. completed a minimum of:

- 6 credit hours in English - ESL courses cannot be used to satisfy this requirement;
- 6 credit hours in Mathematics or 3 credit hours in Calculus;
- 6 credit hours in Psychology;
- the former Science 1150 and 1151; or 9 credit hours from 3 separate Science areas 6 credit hours of which must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement. The science areas are: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics; or a Focus Area in Science;
- 6 credit hours in any combination to be chosen from: Anthropology, Archaeology, Economics, Folklore, Geography, History, Linguistics, Political Science, Religious Studies, Sociology;
- 6 credit hours in French (recommended) or 6 credit hours in a single language other than English, or demonstration of equivalent competency in a second language; and
- the equivalent of a completed focus area as per Table 6 Focus Areas for Bachelor of Education (Primary/Elementary) or the completion of a major or minor within the initial Bachelor's degree program in a subject area classified as a focus area.
An applicant with French as a Focus Area must apply under the French as a Second Language Option.

4. In assessing applications to the Bachelor of Education (Primary/Elementary) as a Second Degree program, consideration will be given to the following:
a. overall academic performance; and
b. personal statement and references as outlined on the application to the Faculty
5. A student must attend full-time due to the structured, sequential nature of this program. A student who drops any course which is part of the program will be withdrawn from the entire program.
6. A student who has been admitted to the program but chooses not to attend in the Fall semester of the year of admission will lose admission status. Such a student may reapply for admission at a later date, and must submit a new application which will be considered in competition with other applicants.

### 8.6.1 Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Option

In addition to meeting the Admission Requirements for the Bachelor of Education (Primary/Elementary) as a Second Degree an applicant for this option must have completed a major in French of at least 36 credit hours or equivalent and achieved at least an average of $65 \%$ in the 36 credit hours. Applicants with a French major must have written the DELF Tout Public (Level B2) and achieved an overall grade of at least $70 \%$, with no less than $60 \%$ in any one skill area of the exam. Applicants must have completed at least eight weeks at an approved Francophone institution in a French speaking area or have acquired equivalent work experience in a Francophone environment. Admission to this option will be competitive and based on overall academic performance and demonstrated commitment, in the personal statement, to studies in French and French Education. Applicants who are unable to fulfill the eight week immersion requirements will be considered on a case-by-case basis.

### 8.7 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education

This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the Office of Academic Programs.

1. For application deadlines refer to the Application Deadline Dates table.
2. Consideration will be given to the courses for which an applicant is registered at the time of assessment of applications. An applicant who has attended institutions other than Memorial University of Newfoundland must supply transcripts indicating Fall semester grades by February 1.
3. To be considered for admission to the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, an applicant must have:
a. been awarded a Bachelor's Degree, or approved (prior to program startup) for the award of a Bachelor's Degree from a university recognized by Memorial University of Newfoundland;
b. achieved a cumulative average of at least $65 \%$ or an average of at least $65 \%$ on the last attempted 30 credit hours;
c. completed a minimum of:

- 6 credit hours in English - ESL courses cannot be used to satisfy this requirement;
- 6 credit hours in Mathematics or 3 credit hours in Calculus;
- 6 credit hours in Psychology;
- the former Science 1150 and 1151; or 9 credit hours from 3 separate Science areas, 6 credit hours of which must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement. The science areas are: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics; or a Focus Area in Science;
- 6 credit hours in any combination to be chosen from: Anthropology, Archaeology, Economics, Folklore, Geography, History, Linguistics, Political Science, Religious Studies, Sociology;
- 6 credit hours in French (recommended) or 6 credit hours in a single language other than English, or demonstration of equivalent competency in a second language; and
- the equivalent of a completed focus area as per Table 6 Focus Areas for Bachelor of Education (Primary/Elementary) or the completion of a major or minor within the initial 'Bachelor's degree program in a subject area classified as a focus area. The focus area of French is typically not available in this program. For further information contact the Office of Academic Programs.

4. In assessing applications, consideration will be given to the following:
a. overall academic performance;
b. personal statement and references as outlined in application to the faculty; and *
c. admission interview (selected candidates).

### 8.8 Bachelor of Music Conjoint with Bachelor of Music Education

1. For application deadlines refer to the Application Deadline Dates table.
2. Applications for admission are considered once a year normally to the Fall semester. Consideration will be given to the Winter semester courses for which an applicant is registered at the time of application.
3. At the time of application, an applicant must have been formally admitted to, and be in clear standing with, the School of Music.
4. To be considered for admission, an applicant must have successfully completed a minimum of 45 credit hours with either a cumulative average of at least $65 \%$ or an average of at least $65 \%$ on the last attempted 30 credit hours.
Within the 45 credit hours, an applicant must have completed the following:
a. at least 6 credit hours in English designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses;
b. at least 3 credit hours from the following: Music 3221, 3222, 3231, 3232, 3233, 3241, 3242, 3261, 3281, 3282;
c. at least 12 credit hours in Music, in addition to the 3 credit hours used to satisfy the clause directly above.
5. In assessing applications, consideration will be given to the following:
a. average in the courses required for admission in clause 4. above;
b. overall academic performance; and
c. personal statement and references as outlined on the application to the Faculty. One reference must be from a faculty member of the School of Music.

### 8.9 Bachelor of Music Education as a Second Degree

1. For application deadlines refer to the Application Deadline Dates table.
2. Applications for admission are considered once a year normally to the Fall semester. Consideration will be given to the Winter semester courses for which an applicant is registered at the time of application.
3. An applicant who has been awarded a Bachelor's degree in Music (or equivalent) from a recognized post-secondary institution may be admitted to the program leading to the degree of Bachelor of Music Education provided that the pattern of courses for the first degree is acceptable to the Selections Committee of the Faculty of Education. This pattern normally includes courses or equivalent experiences in conducting and instrumental techniques (brass, woodwinds, strings and percussion).

### 8.10 Bachelor of Special Education

This program is currently under review. For more information contact the Office of Academic Programs.

1. For application deadlines refer to the Application Deadline Dates table.
2. Consideration will be given to the courses for which an applicant is registered at the time of application. Provisional acceptance may be granted to an applicant who will successfully complete all prerequisites prior to commencement of the program. A percentage of program spaces will be allocated to applicants having relevant teaching experience.
3. To be considered for admission an applicant shall have a minimum of a $65 \%$ average in the last 60 attempted credit hours (not including the internship) and also meet the following requirements:
a. have been awarded a degree in Primary and/or Elementary Education, Music Education, or Intermediate/Secondary Education from Memorial University of Newfoundland or from an institution recognized by Memorial University of Newfoundland;
b. have completed Education 4240 (or equivalent);
c. have completed Education 3312 and 3543 , or 4350 (or equivalent); and
d. have successfully completed a professional internship in education or have equivalent teaching experience prior to admission.
4. There are four Education courses applicable to the Special Education degree program that may be completed prior to admission (following completion of an Education degree) subject to space availability. They are Education 3040, 3640, 3660, 3941 (see the Course Descriptions section for prerequisites).

### 8.11 Diploma in Adult Learning and Post-Secondary Education

1. For application deadlines refer to the Application Deadline Dates table.
2. To be considered for admission an applicant must have completed one of:
a. a training program or slate of post-secondary level courses; or
b. the Post-Secondary Instructor Certificate awarded by the Government of Newfoundland and Labrador.

Programs and courses will be assessed by the Selections Committee for Post-Secondary Education.

## 9 Program Regulations

The admission/readmission regulations for each degree and diploma program listed below can be found at Admission/Readmission Regulations for the Faculty of Education.
In addition to meeting Program Regulations for the student's program of admission/readmission a student must also meet UNIVERSITY REGULATIONS.

### 9.1 Bachelor of Education (Intermediate/Secondary)

- The full-time, 51 credit hour Bachelor of Education (Intermediate/Secondary) is a second degree program offered in three consecutive semesters (12 months) and commences in the Fall semester of each year.
- A student must complete the 51 credit hours in the academic semesters, sequence and course load as set out in Table 1 Bachelor of Education (Intermediate/Secondary) below. A student must also have complied with the Regulations for Readmission and Advancement for this program.

Table 1 Bachelor of Education (Intermediate/Secondary)


### 9.2 Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education

- The full-time, 69 credit hour Bachelor Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education is offered in four consecutive semesters.
- The 69 credit hours shall include 30 credit hours in intermediate and secondary education, 24 credit hours in technology education and 15 credit hours of internship. A student must also have complied with the Regulations for Readmission and Advancement for this program.
- A student shall complete the 69 credit hours in the academic semesters, sequence and course load as set out in Table 2 Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education below.

Table 2 Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education

| Term | Required Courses |
| :---: | :---: |
| Spring - Semester 1 | ED 2711 <br> ED 2750 <br> ED 2752 <br> ED 3750 <br> ED 3751 <br> ED 4427 <br> Courses may be offered in the Spring, Intersession and/or Summer Session. |
| Fall - Semester 2 | ED 4005 <br> ED 406T <br> ED 4240 <br> ED 4260 <br> One of the following: ED $4120,4121,4142,4154,4161,4174,4180,4190$. This methodology course must be chosen to match the academic discipline under which the student was admitted. Those with a Geography discipline are required to complete either ED 4180 or 4174. Those with a Social Studies discipline (Canadian Studies, Economics, History, and Political Science) are required to complete ED 4180. <br> One of: ED 4750, 4752, 4753 (to be determined by the Office of Academic Programs) ED 5000 (non-credit) <br> This semester will follow a schedule that falls outside the normal teaching semester. Consult the University Diary for applicable dates. |
| Winter - Semester 3 | ED 407T <br> a second course from: ED 4750, 4752, 4753 (to be determined by the Office of Academic Programs) ED 5000 (non-credit) <br> This semester will follow a schedule that falls outside the normal teaching semester. Consult the University Diary for applicable dates. |
| Spring - Semester 4 | ED 4242 <br> ED 4381 <br> ED 4390 <br> a third course from: ED 4750, 4752, 4753 <br> ED 4950 <br> ED 5000 (3 credit hours) <br> Courses may be offered in the Spring, Intersession and/or Summer Session. |

### 9.3 Bachelor of Education (Post-Secondary) as a First Degree

- The full or part-time Bachelor of Education (Post-Secondary) as a First Degree is the equivalent of a 120 credit hour program.
- The requirements for the Bachelor of Education (Post-Secondary) as a First Degree are listed in Table 3 Bachelor of Education (Post-Secondary) as a First Degree.
- For waiver of Education 4735 see Waiver Guidelines - Education 4735.

Table 3 Bachelor of Education (Post-Secondary) as a First Degree

| Required Courses |
| :--- |
| 6 credit hours in English |
| 30 credit hours that satisfy the requirements for the Diploma in |
| Adult Learning and Post-Secondary Education as follows: |
| ED $2700,2710,2730,2740,3280,4735$ and 12 credit hours |
| chosen from ED 2800, 2803, 2806, 3730, 3801, 4730 with no |
| more than 6 credit hours at the 2000 level |
| 30 credit hours in recognition of prior learning. Students who are |
| not eligible for the maximum of 30 credit hours upon |
| admission will be required to obtain further work experience |
| and/or complete additional university courses. |
| 30 non-Education credit hours to complement and strengthen an |
| area of teaching specialization or to provide development in |
| an area within the field of post-secondary education. |


| Elective Courses |
| :--- | :--- |
| 12 additional credit hours chosen from ED 2720, 2801, 2900, |
| $3210,3440,3710,3720,3730,3801,4710,4730,4760-4780$ |
| 12 additional credit hours in non-Education electives |

3210, 3440, 3710, 3720, 3730, 3801, 4710, 4730, 4760-4780
12 additional credit hours in non-Education electives

### 9.3.1 Waiver Guidelines - Education 4735

A student who has at least one year of Post-Secondary or Adult instructional experience (documented) and who provides a letter from their current/former supervisor to the Office of Academic Programs certifying the duration and quality of their experience, may be excused from Education 4735. Students who are excused from taking the student teaching course must substitute in its place Education 2900 or an appropriate course in Education designated Adult Learning and Post-Secondary Education or Post-Secondary Education to make up the total required credit hours for the degree.

### 9.4 Bachelor of Education (Post-Secondary) as a Second Degree

- The Bachelor of Education (Post-Secondary) as a Second Degree is a full or part-time, 36 credit hour program intended for students who have completed an appropriate Bachelor's degree.
- The 36 credit hours are set out in Table 4 Bachelor of Education (Post-Secondary) as a Second Degree.
- A student can be awarded only one of the Diploma in Adult Learning and Post-Secondary Education, the former Diploma in Adult Teacher Education, the former Diploma in Post-Secondary Education or the Bachelor of Education (Post-Secondary) as a Second Degree.
- A student must also comply with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Second Degree.
- For waiver of Education 4735 see Waiver Guidelines - Education 4735.

Table 4 Bachelor of Education (Post-Secondary) as a Second Degree

| Required Courses in Education | Elective Courses in Education |
| :--- | :--- |
| ED 2700, 2710, 2730, 2740, 3280, 4735 | 12 credit hours chosen from ED 2720, 2800, 2801, 2803, 2806, 3210, 3730, 3801, 4730 <br> with no more than 6 credit hours at the 2000 level <br> 6 additional credit hours chosen from ED 2900, 3440, 3710, 3720, 3730, 3801, 4710, <br> $4730,4760-4780$ |

### 9.5 Bachelor of Education (Primary/Elementary) as a First Degree

- The Bachelor of Education (Primary/Elementary) as a First Degree is a 150 credit hour program.
- The 150 credit hours must include: 75 credit hours in non-education courses including the courses required for admission, courses required to complete a focus area listed under Table 6 Focus Areas for Bachelor of Education (Primary/Elementary) below, and Human Kinetics and Recreation 2001; and 75 credit hours in Education courses as set out in Table 5 Bachelor of Education (Primary/Elementary) as a First Degree.
- Following admission, a student will normally progress in attaining the 150 credit hours required for the Bachelor of Education (Primary/Elementary) as a First Degree, in the academic terms, sequence and course load as set out in Table 5 Bachelor of Education (Primary/Elementary) as a First Degree. In particular, a student must have all non-education requirements completed prior to Professional Year; must enrol full-time during the Professional Year; and may enrol in the internship only after successful completion of the Professional Year.

Table 5 Bachelor of Education (Primary/Elementary) as a First Degree

| Term | Required Courses |
| :---: | :---: |
|  | 75 credit hours in non-education courses including the courses required for admission |
| Fall - Semester 1 | ED 3618 <br> ED 3951 <br> Human Kinetics and Recreation 2001 <br> 6 credit hours in non-Education courses |
| Winter - Semester 2 | ED 3484 <br> ED 3619 <br> ED 3952 <br> 6 credit hours in non-Education courses |
| Fall - Semester 3 (Professional Year, Semester 1) | Four Education courses from: ED 3120, 3131, 3273, 3312, 3322, 3940, 3962 (to be determined by the Office of Academic Programs, Faculty of Education) <br> One of ED 2050, 2194, 2515, 3050, 4205, 4240 or 4242 . ED 2515 is required for students with a music focus area. ED 3050 is required for students with a French focus area. <br> Non-credit field experience (five days) |
| Winter - Semester 4 (Professional Year, Semester 2) | Four additional Education courses from: ED 3120, 3131, 3273, 3322, 3543, 3940, 3962 (to be determined by the Office of Academic Programs, Faculty of Education) One of ED 2050, 2194, 2515, 3050, 4205, 4240 or 4242. ED 2515 is required for students with a music focus area. ED 3050 is required for students with a French focus area. <br> Non-credit field experience (five days) |
| Fall - Semester 5 | ED 401X |
| Winter - Semester 6 | ED 4240 (or ân Education elective if ED 4240 has been completed previously) <br> ED 4362 <br> ED 4383 <br> ED 4425 <br> 3 credit hours in an Education Elective |

Table 6 Focus Areas for Bachelor of Education (Primary/Elementary)

English (24 credit hours)
6 credit hours in English at the 1000 level
English 2390 or 3395
3 credit hours chosen from English 2000, 2001, 2005-2007, 3200, 3201, 3205
3 credit hours chosen from English 2002-2004, 2010 or the former 2020, 2350, 2351
6 credit hours chosen from English 2146, 2150, 2151, 2155, 2156, 2160, 3145,
3147-3149, 3152, 3155-3158
3 additional credit hours in English at the 2000 level or above

## French ( $\mathbf{3 6}$ credit hours)

The equivalent of a major in French with a maximum of 6 credit hours at the 1000 level. An average of at least $65 \%$ in the 36 credit hours.
At least eight weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment.
It is recommended that a student complete at least one of French 2900, 3650, 3651, 3653, 3654.
An applicant with French as focus area must have written the DELF Tout Public (Level B2) and achieved an overall grade of at least $70 \%$, with no less than $60 \%$ in any one skill area of the exam.
This focus area is typically not available in the Bachelor of Education (Primary/ Elementary) as a Second Degree Conjoint with Certificate in STEM. Education. For further information contact the Office of Academic Programs.

## History ( $\mathbf{1 8}$ credit hours)

3 credit hours in History at the 1000 level
9 credit hours in History at the 2000 level
6 credit hours in Newfoundland and Labrador History at the 3000 level


## Linguistics (18 credit hours)

Linguistics 1100 or 1155 (Linguistics 1155 is recommended)
Linguistics 1103
Linguistics 1104
Linguistics 2210
6 credit hours chosen from Linguistics $3000,3100,3104,3155,3201,3210,3500,3850$

## Music (18 credit hours)

Music 1106 or 1120
3 credit hours chosen from Music 2011, 2012, 2013, 2014
3 credit hours chosen from Music 2021, 2022, 2023, 2611, 2612, 2613, 2614, 2619
(admission to 2612, 2613 and 2619 is by audition only)
6 credit hours chosen from Müsic 3014, 3015, 3016, 3017, 3018, 3019, 4040
3 additional credit hours from the courses in 2nd and 4th clauses above,

## Religious Studies ( 18 credit hours)

Religious Studies 1000
3 credit hours chosen from Religious Studies 2013, the former 2130, the former 2140, 2330, 2340
3 credit hours chosen from Religious Studies 2400, 2410, 2420, 2425, 2430
3 credit hours chosen from Religious Studies 2350, 2610, 2810, 2811, 2812, the former 2820, 2830
6 credit hours in Religious Studies at the 3000 level or above

## Theatre Arts (18 credit hours)

For information on the Theatre Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.

Folklore (24 credit hours)
Folklore 1000
Folklore 2100, 2300, 2401, 2500
9 credit hours in Folklore at the 3000 or 4000 level

Geography (18 credit hours)
Geography 1050, 2001, 2102, 2195, 2302, and 2425

Interdisciplinary Studies (18-24 credit
hours)
Non-Education courses for cohorts in special offerings of the program approved by the Faculty of Education. For information on Interdisciplinary Studies Focus Areas students should contact the Undergraduate Admissions Office, Faculty of Education.

## Mathematics ( 18 credit hours)

No more than 6 credit hours in
Mathematics at the 1000 level and at least 3 credit hours in Mathematics at the 3000 level.

Physical Education (18 credit hours)
Human Kinetics and Recreation 1000, 2210, 2300
9 credit hours chosen from Human Kinetics and Recreation 2002, 2310 or 2311, 2320, 2600, 2601, 3330, 3340, 3400, 3490
Science (18 credit hours)
At least 6 credit hours in each of two subject areas selected from Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, or Physics.
At least 6 credit hours used to meet this requirement must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement.

## Visual Arts (18 credit hours)

Courses in Art History may be used to satisfy this requirement in whole or in part. For information on the Visual Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.

### 9.6 Bachelor of Education (Primary/Elementary) as a Second Degree

The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information contact the Office of Academic Programs.

- The Bachelor of Education (Primary/Elementary) as a Second Degree is a 72 credit hour program intended for students who have completed an appropriate Bachelor's degree. This program is offered in a five semester, full-time format and commences in the Fall semester of each year.
- In addition to meeting these regulations, students must also meet UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Second Degree.
- The Bachelor of Education (Primary/Elementary) as a Second Degree requires 72 credit hours normally completed in the academic terms, sequence, and course load as set out in Table 7 Bachelor of Education (Primary/Elementary) as a Second Degree.

Table 7 Bachelor of Education (Primary/Elementary) as a Second Degree

| Fall - Semester 1 <br> Learning and Teaching Learners | ED 3312, 3617, 401T, 4240, 4381, 5001 (non-credit) <br> HKR 2001 |
| :--- | :--- |
| Winter - Semester 2 <br> Learning and Teaching Curriculum | ED 3273, 3322, 3940, 3962, 402T,4242, 5001 (non-credit) |
| Intersession - Semester 3 <br> Learning and Teaching Integration | ED 2051, 3120, 3566, 3574, 4206, 4391 |
| Fall - Semester 4 <br> Learning and Teaching Frameworks | ED 3131, 3151, 3212,3274, 3543, 3942, 3953, 403T, 5001 (non- <br> credit) |
| Winter - Semester 5 <br> Learning and Teaching Identity | ED 404T, 4427,5001 |

### 9.6.1 Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Option

- The Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Option, is a 75 credit hour program intended for students who have completed an appropriate Bachelor's degree. This program is offered in a five semester (plus August institute), full-time format and commences in August of each year.
- A student will normally attend full-time and complete the required 75 credit hours in the academic terms, sequence, and course load as set out in Table 8 Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Option.
- In addition to meeting these regulations, students must also meet UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Second Degree.

Table 8 Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Option

| Three Week August Institute | ED 4155, |
| :--- | :--- |
| Fall - Semester 1 <br> Learning and Teaching Learners | ED 3312, 3617, 401T, 4240, 4381, 5001 (non-credit) <br> HKR 2001 |
| Winter - Semester 2 <br> Learning and Teaching Curriculum | ED 3273, 3322, 3940, 3962, 402T, 4242, ED 5001 (non-credit) |
| Intersession - Semester 3 <br> Learning and Teaching Integration | ED 2051, 3120, 3566, 3574, 4206, 4391 |
| Fall - Semester 4 <br> Learning and Teaching Frameworks | ED 3050, 3131, 3274, 3543, 3942, 3953, 403T, 5001 (non-credit) |
| Winter - Semester 5 <br> Learning and Teaching Identity | ED 404T, 4427, 5001 |

### 9.7 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education

This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the Office of Academic Programs.

- The Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education is an 85 credit hour integrated program intended for students who have completed an appropriate Bachelor's degree. This program is offered in a two year (September - May), full-time format and commences in the Fall semester of each year.
- In addition to meeting these regulations, students must also meet UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Second Degree.
- A student will attend full-time and complete the required 85 credit hours in the academic terms, sequence, and course load as set out in Table 9 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education.

Table 9 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education

| Phase I <br> (September - December) | Phase II <br> (January - May) | Phase III (September - December) | Phase IV <br> (January - May) |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { ED } 410 T \\ & \text { ED } 4100 \end{aligned}$ | ED 420T | $\begin{aligned} & \text { ED 440T } \\ & \text { ED } 4400 \end{aligned}$ | ED 4500 |
|  | ED 4200 |  | Four credit hours in Institutes |
|  | $\text { ED } 4600$ |  | in STEM Education (4660- |
|  | Four credit hours in Institutes in STEM Education (46604680, 4690-4699) |  | 4680, 4690-4699) |

The Bachelor of Music Education is delivered in two formats: the Bachelor of Music Conjoint with Bachelor of Music Education and Bachelor of Music Education as a Second Degree.

### 9.8.1 Bachelor of Music Conjoint with Bachelor of Music Education

- A student for the Bachelor of Music Conjoint with Bachelor of Music Education shall be required to complete a minimum of 159 credit hours in accordance with the Bachelor of Music degree regulations for the Bachelor of Music Conjoint with Bachelor of Music Education and the regulations below.
- A student shall complete 45 credit hours in Education as set out in Table 10 Bachelor of Music Conjoint with Bachelor of Music Education.

Table 10 Bachelor of Music Conjoint with Bachelor of Music Education

| Bachelor of Music Requirements | Bachelor of Music Education Requirements |
| :--- | :--- |
| see Bachelor of Music Conjoint with | ED 3618 or 4260 |
| Bachelor of Music Education under | one of ED 4362, 4381, 4383 |
| School of Music section of the Calendar. | ED 2500, 2545,2520,3920, 3925, 4240, and 4830 |
|  | ED 403X |
|  | 3 other credit hours in Education other than Music Education. It is recommended that |
|  | these 3 credit hours be used toward the acquisition of instructional content in a second |
|  | teachable area. |

### 9.8.2 Bachelor of Music Education as a Second Degree

- A student for the Bachelor of Music Education must have been awarded a Bachelor's degree in Music (or equivalent) from a recognized post-secondary institution.
- The degree of Bachelor of Music Education may be awarded upon the successful completion of at least 45 additional credit hours in accordance with Table 11 Bachelor of Music Education as a Second Degree below.

Table 11 Bachelor of Music Education as a Second Degree

```
ED 3618 or 4260
one of ED 4362, 4381, 4383
ED 2500, 2515, 2520, 3920, 3925, 4240, and 4830
ED 403X
3 other credit hours in Education other than Music Education. It is recommended that these 3 credit hours be used toward the
    acquisition of instructional content in a second teachable area.
```


### 9.9 Bachelor of Special Education

This program is currently under review. For more information contact the Office of Academic Programs.

- The full or part-time Bachelor of Special Education requires the completion of the Memorial University of Newfoundland Bachelor of Education Degree Primary and/or Elementary, Music Education, or Intermediate/Secondary, or another Education degree deemed appropriate by the Faculty of Education.
- In addition a student must complete a further 36 credit hours as outlined below in Table 12 Bachelor of Special Education.
- A limited number of courses are available through distance education. A student must comply with the University's Regulations for a Second Degree as outlined in the University Regulations section of the Calendar.

Table 12 Bachelor of Special Education

| Table 12 Bachelor of Special Education |  |
| :--- | :--- |
| Required Education Courses | Elective Education Courses |
| ED 3040 | 18 credit hours chosen from: ED 3640, 3660, 3680, 3690, 3941, 4505, 4510, 4515, 4520, |
| ED 3600 | $4530,4540,4541,4543$ |
| ED 3610 |  |
| ED 3620 |  |
| ED 3630 |  |
| ED 3650 |  |

### 9.10 Diploma in Adult Learning and Post-Secondary Education

The Diploma in Adult Teacher Education and the Diploma in Post-Secondary Education have been replaced with the Diploma in Adult Learning and Post-Secondary Education.

- The Diploma in Adult Learning and Post-Secondary Education is a part-time program and requires 30 credit hours in Education courses as outlined in Table 13 Diploma in Adult Learning and Post-Secondary Education.
- At least 21 of the 30 credit hours required for the Diploma must be completed at this University.
- For waiver of Education 4735 see Waiver Guidelines - Education 4735.

Table 13 Diploma in Adult Learning and Post-Secondary Education

| Required Courses in Education | Elective Courses in Education |
| :--- | :--- |
| ED 2700, 2710, 2730, 2740, 3280, 4735 | 12 credit hours in Education chosen from: ED 2720, 2800, 2801, |
|  | $2803,2806,3210,3730,3801,4730$, with no more than 6 credit |
| hours at the 2000 level. |  |

## 10 Regulations for Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a Second Degree, Bachelor of Education (Intermediate/Secondary), and Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education

These regulations apply to the Bachelor of Education (Primary/Elementary) as a Second Degree, Bachelor of Education (Intermediate/ Secondary), and Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education. For any of the degree programs not listed here see Regulations for the Readmission and Advancement for the Bachelor of Education (Primary/ Elementary) as a Second Degree Conjoint with Certificate in STEM Education and Regulations for Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a First Degree, Bachelor of Music Conjoint with Bachelor of Music Education, Bachelor of Music Education as a Second Degree, Bachelor of Special Education, Bachelor of Education (Post-Secondary) as a First Degree, Bachelor of Education (Posst-Secondary) as a Second Degree, and Diploma in Adult Learning and Post-Secondary Education.

1. A student must successfully complete all courses, attain an overall semester average of at least $65 \%$, and a grade of PAS (pass) in the internship(s). A student who fails to meet any of the above criteria will be required to withdraw from the program.
2. Notwithstanding Clause 1., the Committee on Undergraduate Studies, on recommendation from the Admissions Committee, reserves the right to require a student to withdraw from the Faculty at any time if, in the opinion of the Committee, the student is deemed unsuitable for continued attendance in the programs.
3. In exceptional circumstânces, waiver of these regulations may be granted by the Committee on Undergraduate Studies, Faculty of Education, on advice of the Office of Academic Programs.

## 11 Regulations for the Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education

1. A student must obtain a PAS (pass) in each course of a Phase to successfully meet the requirements for that Phase. Successful completion of a Phase is pre-requisite for the next Phase. A student who does not successfully complete a Phase will be required to withdraw from the program and seek re-entry the following year.
2. Notwithstanding Clause 1., the Committee on Undergraduate Studies, on recommendation from the Admissions Committee, reserves the right to require a student to withdraw from the Faculty at any time if, in the opinion of the Committee, the student is deemed unsuitable for continued attendance in the program.
3. In exceptional circumstances, waiver of these regulations may be granted by the Committee on Undergraduate Studies, Faculty of Education, on advice of the Office of Academic Programs.

# Regulations for Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a First Degree, Bachelor of Music Conjoint with Bachelor of Music Education, Bachelor of Music Education as a Second Degree, Bachelor of Special Education, Bachelor of Education (Post-Secondary) as a First Degree, Bachelor of Education (Post-Secondary) as a Second Degree, and Diploma in Adult Learning and Post-Secondary Education 

These regulations apply to the Bachelor of Education (Primary/Elementary) as a First Degree, Bachelor of Music Conjoint with Bachelor of Music Education, Bachelor of Music Education as a Second Degree, Bachelor of Special Education, Bachelor of Education (PostSecondary) as a First Degree, Bachelor of Education (Post-Secondary) as a Second Degree, and Diploma in Adult Learning and PostSecondary Education. For any of the degree or diploma programs not listed here see Regulations for the Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education and Regulations for Readmission and Advancement for the Bachelor of Education (Primary/Elementary) as a Second Degree, Bachelor of Education (Intermediate/Secondary), and Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education.

1. a. Following admission to a program of the Faculty of Education, all full-time students must obtain a semester average of at least $65 \%$ in order to remain in clear standing in the Faculty.
b. These regulations will be applied to part-time students only after they have completed 12 consecutive credit hours on a part-time basis.
2. A student who fails to obtain a semester average of $65 \%$ but who is eligible for readmission under UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate) will be placed on probation in the Faculty. A probationary student who fails to obtain a $65 \%$ average during the next semester in which the student completes courses will be required to withdraw from the Faculty.
3. A student completing the Bachelor of Education (Primary/Elementary), Bachelor of Music Conjoint with Bachelor of Music Education, or the Bachelor of Music Education as a Second Degree who attains a grade of FAL (fail) in the internship will either:
a. be required to withdraw from the program; or
b. with the recommendation of the Office of Academic Programs, Faculty of Education, repeat the internship in another school setting.
4. A student who has been required to withdraw from the Faculty of Education may, after a lapse of at least two semesters, apply for readmission to the Faculty. A student who is readmitted under this Clause will be considered probationary and must meet requirements stated in Clause 2. above
5. A student who is required to withdraw from the University under UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) will be required to withdraw from the Faculty of Education.
6. A student who has been required to withdraw from the Faculty on two occasions will be ineligible for future readmission.
7. Notwithstanding Clauses 1. through 4., the Committee on Undergraduate Studies on recommendation from the Admissions Committee reserves the right to require a student to withdraw from the Faculty at any time if, in the opinion of the Committee, the student is deemed unsuitable for continued attendance in the programs.
8. A student who has been required to withdraw from the Faculty may register only in those Education courses listed as applicable for non-Education students.
9. In exceptional circumstances, the Committee on Undergraduate Studies may waive the Readmission and Advancement regulations for the Faculty of Education as stated above.

## 13 Graduation

Upon meeting the qualifications for any of the programs offered by the Faculty a student must apply to graduate on the prescribed "Application for Graduation" form available at Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 14 Waiver of Faculty Regulations

A student has the right to request waiver of Faculty regulations. The requirement for a specific course, or courses, may in special circumstances, and upon individual request, be waived by the Committee on Undergraduate Studies. Such waivers shall not reduce the total number of credits required for the Degrees or Diploma.
A student wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

## 15 Appeal of Decisions

Any student whose request for waiver of Faculty regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 16 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, contact the Dean of the Faculty.
All courses of the Faculty are designated by ED.

## Legend:

ACP: Courses for students in the Aboriginal Community Based programs
AL: Courses for students in the Adult Learning and PostSecondary Education program
IS: Courses for students in the Intermediate/Secondary program
ISI: Courses for students in the Intermediate/Secondary Conjoint with the Technology Education program
ME: Courses for students in the Music Education program
PE: Courses for students in the Primary/Elementary programs
PS: Courses for students in the Post-Secondary Education programs
SE: Courses for students in the Special Education program
ST: Courses for students in the Bachelor of Education (Primary/ Elementary) as a Second Degree Conjoint with Certificate in STEM Education program
2022 The Teaching of Inuttut (ACP) focuses on the preparation of materials and the development of methods, strategies and assessment techniques for the teaching of Inuttut In schools In Labrador.

2023 Language and Culture in Education (ACP) explores contexts, curricula and materials that recognize cultural diversity (especially Aboriginal cultures), foster the teaching and maintenance of Aboriginal languages, and support the work of Aboriginal language specialists In the classroom.
2032 The Teaching of Innu-aimun (ACP) focuses on the preparation of materials and the development of methods, strategies and assessment techniques for the teaching of Innu-almun In schools In Labrador.
2038 Aboriginal Music and Art (ACP) Is a study of music and art in cultural transmission. The course will develop skills In reading and writing associated with Aboriginal cultures. and will emphasize activities for exploring the elements of music. Aboriginal art forms will be explored as well as art in decoration in Aboriginal society.
2039 Aboriginal Land Based Learning (ACP) is for students Interested In learning about the Aboriginal cultures of Newfoundland and Labrador. Under the guidance of Elders and traditional teachers, learners will gain an understanding of Aboriginal pedagogy, land-based learning and ways of incorporating culture into the school curricula. This course Is normally offered at Labrador Institute.

2040 Basic Interpersonal Communication (PE) is designed to help students develop confidence through self-expression, and acquire skills in interpersonal relationships.
CR: the former ED 2041
2050 Introduction to Drama Education (ME,PE) is designed to introduce students to the use of drama as a learning medium. Students will be expected to participate in and to critically analyse practical drama sessions in order to gain an understanding of the fundamental nature of drama. Students will be engaged in a variety of teacher devised drama structures to introduce them to the theory and practice of selected pioneers in the field. Reference will be made to some aspects of child development such as play, cognition, affect and language and their relationship to learning through drama. It is expected that students will begin to formulate a rationale for the use of drama education in their future classroom practice.
CR: the former ED 2030
2051 Learning Through Drama (PE) is an experiential drama education course that will offer students a broad introduction to the potential for using and incorporating drama education in learning experiences and in crosscurricular teaching.

2194 Physical Education in the Primary and Elementary Grades (ME,NPE,PE,T) examines the curriculum organization in physical education for the Primary and Elementary grades; instructional material and teaching techniques for these grades; creative, aesthetic, and health-developing aspects of physical education.
CR: the former ED 3070, or the former ED 2192 taken during the 1984-85 or 1985-86 academic years

2202 Education in Aboriginal and Northern Communities - An Overview (ACP,PE) is an introductory course where students explore teaching in an Aboriginal or northern context with particular focus on Newfoundland and

Labrador. This will include an understanding of philosophical and cultural distinctions between Aboriginal and non-Aboriginal approaches to teaching and learning; an examination of significant historical developments In Aboriginal education and how they may have Impacted Aboriginal education today; an exploration of actual and potential roles played by local Individuals and groups In the education process; models to Improve communication between school and community; and an examination of the current status of Aboriginal education and the major educational challenges facing students, leaders and communities.
2222 Teaching English as a Second Language (PE) includes selection and preparation of materials, and suitable classroom strategies for teaching English as a second language. Stress will be on the methods appropriate to cope with linguistic difficulties encountered in schools by children whose first language is not English.
2500 Orientation to Music Education (ME) is an introduction to music education, bridging life as a musician and the development of a career as a musician-teacher. Topics include an overview of theoretical, philosophical, historical, sociological, cultural, psychological, methodological, and curricular foundations of music education as well as contemporary contexts and issues in music education. Emphasis is on research and writing in music education, technology applications, and the development of functional keyboard skills specific for music educators.
2515 Primary/Elementary School Music Methods (ME,PE) examines current pedagogical practices, methodologies, and resources for use in the primary and elementary school music program. Within the context of authorized K-6 curriculum guides, teacher candidates will develop skills and instructional strategies for developing the singing, moving, playing, listening, and creating child.
CR: the former ED 2510, the former ED 2530
PR: Primary/Elementary program candidates must have completed the focus area in music
2520 Voice and Choral Methods (ME) examines current pedagogical practices, procedures, and resources for use with all levels of school singing ensembles and choirs. Emphasis is placed on developing teacher candidates' own vocal techniques. Topics include philosophy and history of choral music education, vocal and choral pedagogy, and components/ organization of choral programs.
LH: a 2 hour twice weekly laboratory section (MUN Lab Choir) designed to provide practical teaching experience and methodologies in vocal/ choral settings
2700 Academic Literacies in Adult and Post-Secondary Learning Contexts (AL,PS) examines the literacies, discourses and epistemologies of post-secondary learning contexts. Academic areas are ways of knowing which are generated and defended through language, practices and texts. This course explores ways of making explicit these often implicit activities. It provides opportunities to understand different forms of knowledge, what counts as evidence, and how 'texts' are developed, written, read and performed
2710 Course Organization and Development in Post-Secondary Education (AL,PS) examines the development of procedures for the identification of concepts in instructional units; analysis of tasks and identification of related competencies; development of resource units.

2711 Course Organization and Development in Technology Education (ISI) is an examination of the development, structure and organization of technology education curriculum locally and internationally; applications of design and problem solving instructional strategies; the management of resources in technology education laboratories; the development of resource units for teaching.
2720 Introduction to Post-Secondary Education (AL,PS) is a study of the background of Post-Secondary Education and of its development and present forms in Newfoundland, other provinces of Canada, and other countries; an examination of current programs in Post-Secondary Education; the role of federal and provincial governments in Post-Secondary Education.
2730 General Methods of Teaching in Post-Secondary Education (AL,PS) is an introduction to teaching and learning methods in postsecondary and adult learning contexts and it includes preparation, learning goals, aligning assessment and a range of methods such as facilitation, lecturing, active learning, experiential learning and problem-based learning.
2740 Ethics and Professionalism in Adult and Post-Secondary Education (AL,PS) will explore the ethical dimensions of adult and postsecondary education in Canadian higher education. Students will consider the meaning of ethical professional practice within the post-secondary environment. A particular emphasis will be placed upon the application of ethical theories to real world learning contexts within adult and postsecondary education.
2750 Introductory Design and Materials Processes (ISI) examines theory and practice of teaching problem solving, design and materials processes. Topics and practical activities include production and computer assisted design.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of Academic Programs.

2752 Teaching Current and Emerging Power Technology Systems (ISI) provides technology education students with opportunities to apply current teaching and learning strategies to the issues surrounding traditional and emerging energy technologies. Major topics of study include: fundamentals of sustainable energy production and control, redevelopment and use of traditional energy sources, application of solar energy, wind power production, and fuel cell development and utilization.
AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of the Undergraduate Student Services.
2800 Introduction to Adult Education (AL,PS) is a review of the history of the Adult Education movement. The rationale for the investment of public or private resources in the education or training of adults. An examination of current educational philosophies related to Adult Education.

2801 Adult Learning (AL,PS) examines the major foundational theories of adult learning, the contextual nature of adult learning and various dimensions of learning and development throughout adulthood.

2803 Educational Aspects of Adult Development (AL,PS) is an examination of the educational aspects of adult development from early adulthood through middle age to later maturity.
2806 Sociology of Adult Education (AL,PS) explores the sociological context of adult learning. The interrelationship between particular social factors (e.g., age, sex, occupational structure) and the need for adult educational programs are studied. The potential effects of such programs on society are examined with reference to community development. Special emphasis is given to societal change as it relates to education as a way of life.

2900 Introduction to Statistics in Education (ME,PE,PS) is a laboratory course which takes a practical case study approach to survey and quasiexperimental quantitative methods in education, together with supporting statistical concepts of probability, descriptive and inferential statistics sampling and sampling distributions, correlation and bivariate regression. LH: 2

3007 Teaching Strategies in Native and Northern Schools inactive course.

3009 Drama Education in the Primary and Elementary Grades (ME,PE) inactive course.

3040 The Assessment and Development of Children's Language Abilities (PE,SE) focuses on techniques for assessing language abilities in primary/elementary and intermediate/secondary students and will provide models for developing strategies in implementing language instruction appropriate to students' needs.
PR: ED 4350, 3543, or the former 3540 or 3545
3050 The Teaching of French as a Second Language in the Primary and Elementary Grades (ME,PE) is an introduction to the general principles of second-language teaching, to the curriculum materials currently prescribed for use in the schools, and to a consideration of teaching strategies and evaluation techniques associated with these materials.
OR: for students completing the Bachelor of Education
(PrimaryIElementary) as a Second Degree, French Immersion Option
this course will be taught in French
PR: French 2101
3052 and 3053 Institute for Teachers of Core French in the Elementary Grades (PE) - inactive course
3120 Foundations of Art Education (ME,PE) develops an understanding of art in relation to current theories of education and art education and to provide individual exploration of an experience in appropriate techniques. Curriculum will be examined with the focus on understanding how to provide favourable conditions and experiences for high quality individual development in visual expression.
CR: the former ED 2020, the former ED 3110, the former ED 3112
3131 Music Education in the Primary/Elementary Grades (PE) is designed to provide the prospective primary/elementary classroom teacher with the knowledge, skills and understandings necessary for presenting basic music concepts and skills to students and for using music as a means for teaching or enriching other areas of the curriculum. Course work will include study in the three facets of general classroom music: scholarship of the discipline, musicianship, and classroom methodology.
CR: former ED 3130
UL: not applicable towards the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education or the Bachelor of Music Education as a Second Degree
3150 Bilingualism: Linguistic, Cognitive and Educational Aspects (PE) - inactive course.

3151 Multilingualism in the Classroom (PE) is a course whose goal is to introduce pre-service teachers to the needs of students whose first language is not English in the primary/elementary classroom. Emphasis will be placed on the development of language skills in English, issues associated with reading and writing in an additional language and cultural sensitivity in multilingual classrooms.
CH: 1
3210 Introduction to Counselling (AL,PE,PS) is an introduction to the profession of counselling throughout the lifespan with specific emphasis on the definition and history of the profession, the characteristics and professional competencies of a counsellor, ethical issues and principles, theories and current issues. Topics also include an introduction to the nature of counselling and ways of developing effective interpersonal relationships within various educational contexts.
3211 Introduction to Career Education (PE) is an introduction to contemporary concepts and practices of career education and to theories of career development. Emphasis is on the practical application of theory and basic principles to the design and delivery of career education programs and to career counselling. Attention will be given to continuing career counselling and career development needs of individuals as well as to groups with special needs.
CR: the former ED 4906
3212 Counselling Issues and Career Development (PE) is a course whose goal is to highlight prevalent presenting social and developmental issues that are experienced by school-age children, some of which may require collaborative cooperation with guidance counselling colleagues. The course will seek to understand the primary-elementary students' experiences from a holistic lens. Students will engage with content that focuses on developmental and social dynamics that inform student health and functioning, hence impacting school and academic engagement and career development.
CH: 2
3255 Child Abuse and the School-Age Child (PE) will discuss the general issues of child abuse including definitions, detection, reporting, protection, prevention, and the educational implications of child abuse. A number of specific issues including provincial policies presently in force in Newfoundland and Labrador and elsewhere will be examined. The teacher's role in collaboration between officials in education, social work, health and justice agencies will be explored with a view to preventing abuse and modifying the circumstances of abused children.
3273 Science in the Primary/Elementary Grades (PE) is a practical course designed to develop approaches to Science teaching based on student investigation of scientific phenomena. Examples are drawn from both provincial and other major curricula
CR: the former ED 2180, the former ED 3270, the former ED 3275
3274 Infusing STEM into Primary/Elementary Grades (PE) will focus on the nature of STEM (Science, Technology, Engineering, and Mathematics) and how to infuse STEM into the K-6 science curriculum, with a particular emphasis on the inquiry, design process, integrated curriculum, and technology. Teacher candidates will have opportunities to explore several frameworks to support integrated curriculum and plan and implement STEMinfused science learning experiences.
CH: 1
PR: ED 3273, ED 3940
3280 Educational Assessment (AL,PS) is a study of the broad spectrum of educational assessment focussing specifically on the development of objectives, the construction and use of formal teacher-made tests, the use of informal assessment techniques, the interpretation and application of assessment data, continuous evaluation, criterion-referenced measurement, and emerging trends in assessment.
CR: the former ED 4912
3290 Identifying Learner Diversity Within a Context of Culture (PE) inactive course.
3312 Language Arts in the Primary/Elementary School I (PE) provides students with a holistic view of the learning and teaching of language arts (i.e., the receptive language abilities of viewing, listening and reading, and the expressive language abilities of speaking and writing). This course will help students develop a theoretical perspective on two major aspects of language, that being "knowledge of language" (i.e., knowledge of the structures of language) and "knowledge about language" (i.e., knowledge about attitudes and perceptions towards language and the various purposes of language). This course will extend students' understanding of the importance of the home/community influences upon emergent and developmental literacy and language development.
CR: the former ED 2210, the former ED 2220, the former ED 3305, the
former ED 3315
3322 Children's Literature in the Primary/Elementary School (PE) focuses on the personal and educational values for using children's literature in the classroom, examines the literary genres appropriate for primary/ elementary children and explores meaningful literacy extensions to develop
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
children's literacy strategies and skills. In addition, the course examines guidelines for evaluating children's literature for literacy and aesthetic qualities. Instructional strategies to integrate children's literature across the curriculum are explored.
CR: the former ED 2060, the former ED 2065, the former ED 3310, the former ED 3320
3440 Organization and Administration of Programs in Adult Education (PS) examines alternative provincial or regional methods of organization for the provision of Adult Education, including the statutory framework within which Adult Education functions.

3484 Computers and Learning Resources for Primary/Elementary
Teachers (PE) focuses on the integration of computer software and other learning resources into primary/elementary school teaching. Laboratory components will be scheduled so that students may learn how to use and implement communications, applications and curricular software.
CR: the former ED 3480, ED 3801, the former ED 4480, the former ED 4905

3515 Current Approaches to Reading in the Primary and Elementary Grades (PE) - inactive course.
3543 Language Arts in the Primary/Elementary School II (PE) provides students with a social-psychological perspective on children's learning to read, reading and reading to learn. Students will explore current and traditional models of the reading process and the importance of home/ school/community contexts for fostering literacy learning. Students will apply instructional strategies for children's learning of story, book and print concepts, word identification, fluency, vocabulary development and comprehension for a variety of texts.
CR: the former ED 2110, the former ED 2120, the former ED 3540, the former ED 3542, the former ED 3545
PR: ED 3312
3565 Gender and Schooling (PE) is an introduction to the study of gender and education. It includes a historical overview of the link between gender and schooling as well as an examination of contemporary theoretical perspectives and research relating to the role of the school in gender development in general and gender inequality in particular. Implications for educational policy and practices will also be explored.
3566 Affirmative Sexuality and Gender Pedagogy in Education Matters (PE) aims to increase preservice teacher awareness, skill and knowledge with respect to diverse gender and sexuality affirmative practices and pedagogy in the context of educational environments. The course will briefly explore the history of queer, trans*(umbrella term) and two spirit students, families and teacher-educators in educational settings. Affirmative practice with gender and sexuality diverse folks will be explored in the classroom and in teacher practices as an ethic of care.
CH: 1
3570 History of North American Education (PE) - inactive course.
3571 The History of Education in Newfoundland Since 1800 (PE) inactive course.

3573 History and Current Trends in Aboriginal Education in Canada (ACP,PE) is a seminar course that explores how to integrate indigenous knowledge and experience in curriculum and pedagogy in classrooms and communities, and on the land. The course offers insights from past experience and draws on Aboriginal perspectives to understand educational history, current contexts and future directions. Students will develop critical analytical skills and learn about restorative justice, land and place based education, and other pedagogical approaches based on Aboriginal knowledge and cultures.
3574 An Introduction to Indigenous Education (PE) is a course where students will engage in critically examining the challenges of bringing together Indigenous and Western knowledge systems and consider the various models of education that co-construct teaching and learning. Students will gain the pedagogical knowledge and skills to blend Indigenous ways of knowing and doing within the K-12 provincial curricula.
CH: 1
3585 Multiculturalism and Education (PE) - inactive course.
3600 Academic and Behavioural Ássessment (SE) applies the theories of test development in establishing a competent understanding of the utilization of diagnostic and prescriptive instruments as well as teacher-made tests as they apply to the area of exceptional children.
AR: attendance is required
3610 Nature and Characteristics of Intellectual Disabilities (SE) aims to provide an understanding of the nature and characteristics of intellectual disabilities and the psycho-social implications of this area of exceptionality.
3617 Children and Learning (PE) provides an introduction to psychological theories of learning and motivation, and development. The focus is on typical development with some attention to atypical functioning (exceptionality) where appropriate. Emphasis will be placed upon the
application of this knowledge to classroom practice, instruction, and the facilitation of learning.
3618 Nature of the Primary/Elementary School Child - Development (ME,PE) is intended to provide students with an awareness and understanding of the origins of many aspects of child behaviour and competence. While focussing on the development and nature of the "normal" child, where appropriate, contrasts and comparisons will be made between the development of "normal" and "exceptional" individuals.
CR: the former ED 2610, the former ED 3240
3619 Nature of Primary/Elementary School Child - Learning and Cognition (ME,PE) provides an introduction to human learning, motivation and cognition and to the related concepts and theories underlying children's classroom learning and behaviour. Focus will be on typical development with some attention to atypical (exceptionality) functioning in these areas. The course will familiarize students with the concepts and vocabulary used to describe classroom learning and with explanations and justifications for many educational and instructional activities and practices. Particular attention will be paid to application of this knowledge to instruction and classroom management and to the facilitation of learning.
CR: the former ED 3616, the former ED 3615
PR: ED 3618
3620 Nature and Characteristics of Emotional/Behavioural Disorders (SE) includes an examination of procedures for the early identification of children with behavioural disabilities and major systems of classification of behaviour problems. It will also include an analysis of: aberrant adjustment mechanisms, deviant development and specified behaviour problems with implication for therapeutic education.
PR: ED 4240, or the former ED 3220 or ED 3230
3630 Nature and Characteristics of Learning Disabilities (SE) examines our theoretical understanding of the nature and characteristics of learning disabilities. It explores contemporary understandings, assessment/ identification approaches, and current research as it relates to educational

## practice. <br> CR: the former ED 3231

3640 Current Issues in Special Education (PE,SE) consists of a study of special and selected problems related to the teaching of special education with particular emphasis placed on special education within the Province of Newfoundland and Labrador.
PR: ED 4240, or the former ED 3220 or ED 3230
3650 Practicum in Special Education (SE) encompasses a practice experience with students who have an identified exceptionality. The emphasis will be on a supervised field placement in a special education position within a school setting.
PR: completion of 18 credit hours in Special Education including ED 3600
3660 A Study of the Gifted Child (ME,PE,SE) is an examination of the nature and characteristics of gifted children, with emphasis upon methods of identifying gifted children, implications of giftedness for learning and instruction and reviews of several educational programs for the gifted.

3680 Inclusive Practices for Students with Autism Spectrum Disorder (ASD) (SE) examines the nature of ASD with particular focus on methods of behavioural assessment, use of assistive technology and specific therapy techniques. Support programs will be considered within an ecological context that prioritizes collaborative planning with parents and other therapeutic agents.
3690 Collaborative Practice (SE) examines the theoretical and practical aspects of collaborative practice within an interagency model of case planning for students with diverse learning needs. Emphasis is on exploring issues of power/empowerment, consultation, communication, conflict resolution/problem-solving, advocacy and collaboration. Perspectives of parents and families, educators, and community resource professionals will be explored. The course strives to create a family-focussed approach to effective planning in contemporary schools.
3691-3699 Special Topics Courses in Special Education (SE) to be announced by the Faculty of Education.
3710 Group Instruction in Post-Secondary Education (PS) - inactive course.

3720 Individualized Instruction in Post-Secondary Education (PS) inactive course.
3730 Curriculum and Instructional Development in Post-Secondary Education (AL,PS) examines the social, cultural, philosophical, and economic forces influencing changes in Post-Secondary curriculum and instructional methods. Study of current Post-Secondary Education curriculum designs, problems and trends; methods of gathering curriculum information; procedures for revising and evaluating a curriculum.
PR: ED 2710 and ED 2730
3750 Intermediate Design and Materials Processing Technology (ISI) provides opportunities to apply current teaching and learning strategies
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
within the technology education laboratory environment. Technology education students will examine labor trends that are impacting society's ability to expand and maintain today's infrastructure. Innovative teaching methodologies will be utilized to facilitate further investigation of the opportunities offered in skilled trades. Topics include: Red Seal Certification, print reading and application of the National Building Code within selected skilled trades. This course Is normally offered In a three week accelerated format in the Summer Session.
AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of
Academic Programs.
3751 Teaching Intermediate Communication Systems (ISI) examines the application of communication techniques through the various forms of media available. Technology education students will engage in activities that will provide insights into how current teaching and learning strategies can be blended with contemporary communication devices and means to facilitate collaborative lifelong learning. Topics include: web based multimedia, graphic design, audio/video production, animation production and social networking applications. This course Is normally offered In a three week accelerated format in the Summer Session.
AR: attendance is required
3801 Educational Media (AL,PS) introduces audio visual communications with emphasis on equipment operation and basic local production of instructional materials; and the application of computers to education.
CR: the former ED 3480, ED 3484, the former ED 4480, the former ED 4905

3920 Instrumental Teaching Methods (ME) examines current pedagogical practices, procedures, and resources for teaching brass, woodwinds, percussion, and strings in both band and orchestral school settings. Emphasis is placed on the development of comprehensive instrumental music education programs.
LH: a 2 hour twice weekly laboratory section (MUN Lab Band and Orchestra) designed to provide practical teaching experience and methodology in both band and orchestral settings

3925 Intermediate/Secondary School Music Methods (ME) examines current pedagogical practices, procedures, and resources for teaching Music in the intermediate/secondary schools. In addition to standard contexts in general music, choral, and instrumental settings, emphasis is placed on technology and settings such as musical theatre in order to reflect the diversity of music programming in intermediate/secondary schools.
3940 Mathematics in Primary and Elementary Grades (ME,PE) is a general overview of aspects of teaching Mathematics in the primary and elementary grades. Theories of child development as they relate to Mathematics teaching, characteristics of Mathematics topics in primary and elementary grades, and the implications for teaching will be the major topics to be discussed in this course.
CR: the former ED 2340, the former ED 2310, the former ED 2320
3941 Diagnosing and Directing Learning in Primary and Elementary Mathematics (PE,SE) is a study of aspects of diagnosis and remediation in primary and elementary Mathematics, and of the basis for constructing and applying diagnostic techniques. The course offers an examination, development, and application of a variety of manipulative aids and assistive technology to be used in the teaching of Mathematics in the primary and elementary grades.
PR: ED 3940
3942 Teaching and Learning Elementary Mathematics (PE) provides students with an opportunity to explore beliefs about the nature of mathematics and to consider how to teach mathematics for, and with, understanding, with a focus on elementary children. Building upon Education 3940, students will focus on the unique developmental characteristics, beliefs, behaviours and learning needs of elementary children in mathematics. Students will also engage in mathematical practice so they have a shared basis for discussion of particular mathematical topics that appear within the curriculum.

## CH: 2

PR: ED 3940
3945 and 3946 Institute in Teaching of Junior High School Mathematics Courses (PE) will focus on the nature of junior high Mathematics instruction and how it should differ from elementary and high school instruction. Emphasis will be placed on the transition between informal and formal approaches to the teaching of junior high Mathematics. The Van Hiel levels and their implications for instruction in geometry will be discussed. Activities appropriate to the teaching of junior high Mathematics will be developed and demonstrated. A particular focus in this component of the Institute will be on activities appropriate to the new program and how they can be integrated into the junior high Mathematics curriculum.
PR: ED 3940 (or equivalent) or ED 4161 (or equivalent) or permission of the instructor

3951 Curriculum, Instruction, and Assessment in the Primary/ Elementary School I (PE) is designed to engage students in an introduction to curriculum, instruction, and assessment in the primary/elementary school
through active participation in problem solving. Students will be introduced to the different ways that primary/elementary school children view and make sense of their world (i.e., the linguistic, mathematical, scientific, and artistic). Working through such a framework, students will be introduced to instructional strategies and planning, formative and summative assessment, and issues inherent in the management of the primary/elementary classroom, as they create multi-disciplinary, thematic, resource-based units.
OR: for students completing the Bachelor of Education (Primary/ Elementary) as a Second Degree, French Immersion Option this course will be taught in French

3952 Curriculum, Instruction, and Assessment in the Primary/ Elementary School II (PE) is designed to engage students in a deeper exploration of issues in curriculum, instruction, and assessment in the primary/elementary school through active participation in problem solving. Students will be introduced to the different ways that primary/elementary school children view and make sense of their world. Working through such a framework, students will be introduced to instructional strategies and planning, formative and summative assessment, and issues inherent in the management of the primary/elementary classroom, as they create multidisciplinary, thematic, resource-based units.
OR: for students completing the Bachelor of Education (Primary/ Elementary) as a Second Degree, French Immersion Option this course will be taught in French
PR: ED 3951
3953 Assessment for Learning in the Primary/Elementary Grades (PE) is an introduction to the theory and practice of evaluating student learning in the classroom. Topics include the characteristics of classroom assessment; the relationship among assessment, curriculum, and instruction; formative assessment; summative assessment; development, administration, interpretation, and evaluation of assessment activities including teachermade tests, performance-based tasks, and portfolios; assessment for students with exceptional needs; assessment for culturally and linguistically diverse students; grading and reporting progress; and the interpretation and use of assessment information.
3962 Social Studies in the Primary/Elementary School (PE) is an introduction to the social studies program at the primary/elementary school level. Topics to be explored include the nature and purposes of the social studies curricula, approaches to teaching and learning in this curricula area, selecting and utilizing learning resources, and conducting assessment in the social studies.
CR: the former ED 2160, the former ED 3960
4005 Effective Teaching and Learning Environments (IS,ISI) introduces the principles, dispositions, and skills needed to create various types of effective learning environments. Topics include: professional relationships, school culture, decision making classroom management and models of teacher power

401T Introductory Field Experience in the Primary and Elementary School (PE) is a 5 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focus on key learning experiences and graduated responsibilities related to professional teaching. It may include both observation periods and initial teaching experiences. AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
CH: 0
401X Undergraduate Teaching Internship (PE) (equivalent to 15 credit hours in Education) is a 65 day teaching and learning experience, framed by explicit guidelines, designed to provide students an opportunity to integrate theory and practice in the school classroom. It includes both observation periods and extensive teaching experiences. The internship is intended to help students develop their individual style of teaching, to enable students to recognize the scope and complexity of a classroom teacher's role and responsibility, and to provide opportunities for the study of children as individuals and in groups, both in the classroom and other school settings.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
OR: students may not be placed in the first school of choice and may be assigned to another appropriate school
PR: successful completion of the professional year. Students must have completed the professional year of the French Immersion Option to be assigned to a French Immersion classroom.

4020 Topics and Trends in Aboriginal Education (ACP) is a seminar course with a focus on topics and trends in Aboriginal educational research and practice in Newfoundland and Labrador as well as other Aboriginal contexts. The course will provide a greater understanding and appreciation of Aboriginal educational needs and self-determination within national and local socio-political contexts.

402 T Introductory Field Experience in the Primary and Elementary School II (PE) is a 10 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focus on key learning
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
experiences and graduated responsibilities related to professional teaching It may include both observation periods and initial teaching experiences.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
CH: 0
PR: ED 401T
403 T Introductory Field Experience in the Primary and Elementary School III (PE) is a 10 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focus on key learning experiences and graduated responsibilities related to professional teaching.
It may include both observation periods and initial teaching experiences.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
CH: 0
PR: ED 402T
403X Internship in Music Education (ME) (equivalent to 15 credit hours in Education) is a one semester internship in one or more schools to provide student teaching experiences in choral, classroom, and/or instrumental teaching contexts in primary, elementary, intermediate, and/or secondary schools settings.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
OR: students may not be placed in their first district of choice and may be assigned to another Provincial school district
PR: ED 2500, ED 2515, ED 2520, ED 3920, ED 3925 and any additional requirements as outlined in the letter of acceptance to the music education program
404 T Extended Teaching Internship (PE) is a 50 day teaching and learning experience, framed by explicit guidelines, designed to provide students an opportunity to integrate theory and practice in the school classroom. It includes both observation periods and extensive teaching experiences. The internship is intended to help students develop their individual style of teaching, to enable students to recognize the scope and complexity of a classroom teacher's roles and responsibilities, and to provide opportunities for the study of children as individuals and in groups, both in the classroom and other school settings.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
CH: 12
OR: students may not be placed in the first school of choice and may be assigned to another appropriate school
PR: ED 403T and successful completion of semesters one to four of the Bachelor of Education (Primary/Elementary) as a Second Degree. Students must have successfully completed ED 4155 and ED 3050 to be assigned to a French Immersion classroom.
406T Introductory Internship in the Intermediate and Secondary School
(IS,ISI) is a 10 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focuses on key learning experiences and graduated responsibilities related to professional teaching. It includes both observation periods and initial teaching experiences.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
407T Extended Internship in the Intermediate and Secondary School (IS,ISI) is a 60 day teaching and learning experience, framed by explicit guidelines, that focuses on key learning experiences and graduated responsibilities related to professional teaching. It includes both observation periods and extensive teaching experiences.
AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.
CH: 12
CR: the former ED 405X
OR: Interns completing the Bachelor of Education (Intermediate/ Secondary) Conjoint with the Diploma in Technology Education will be placed for part of the internship in a Technology Education classroom setting.
PR: Education 406T. Interns wishing to complete an internship in French immersion must complete Education 4154 and obtain the permission of the Office of Academic Programs. Normally, French immersion interns have the equivalent of a major in French and a minimum of two semesters in a French milieu.
4100 Learners and Learning - Teachers and Teaching (ST) is an integrative course providing students with collective and individual opportunities to critically explore and inquire into the phenomena of learning and teaching through psychological, sociological, and pedagogical lenses/ frames. Students will consider their own emerging philosophies of learning and teaching in relation to current and ongoing fields of study research and within the contexts of their school field experiences.
CH: 16
410T School Field Experience I (ST) is a school field experience designed to assist students during Phase I to re-focus their perceptions and assumptions about teaching and learning. Students spend two field days per week in a partner school, for a total of 24 days.

AR: Attendance is required. With respect to holidays, students follow the schedule of the school and not that of the University.

4120 The Teaching and Learning of Art in the Intermediate and Secondary School (IS,ISI,ME) introduces the rationales for teaching art and examines contemporary art teaching practices. Teacher candidates will examine their roles as artist-teacher and teacher-artist, as well as explore learning in and through art. Topics include curriculum implementation; instructional planning; managing the learning environment; assessment and evaluation; safety; arts advocacy; and visual, artistic and technological literacies.

4121 The Teaching and Learning of Theatre Arts in the Intermediate and Secondary School (IS,ISI,ME) engages teacher candidates in developing their role as theatre artist/teacher. Topics include: beliess informing the practice of theatre arts in the context of school; related pedagogies and educational practices in dialogue with the art form of drama; process drama and theatre education, an interdependent relationship; implementation planning strategies; communication style and facilitative language.
4142 The Teaching and Learning of the English Language Arts in the Intermediate and Secondary School (IS,ISI,ME) draws on research in the teaching and learning of English/language and literacy to prepare teacher candidates to develop engaging, differentiated experiences for students. Topics include: curriculum, the nature and structure of language and literature programs; test analysis, response and critique; writing and representing genres in multimodal and linguistic; media literacy forms; and oracy.

## 4151 Advanced French Methodology (IS,ISI,NS) - inactive course.

4154 The Teaching and Learning of French in the Intermediate and Secondary School (IS,ISI,ME) provides an introduction to the nature and purpose of French programs in Canada. Topics include: an overview of the purpose of core French and French immersion; theories and principles of second-language teaching and learning; methods; techniques, strategies and characteristics of effective planning and assessment in secondlanguage teaching.

## OR: this course will be taught in French

4155 Introduction to Teaching in French Immersion in the Primary and Elementary Grades (ME,PE) is an overview of the development of French Immersion programs and an examination of current models for organization and instruction of French at the primary and elementary levels. This course will focus on methods and strategies for content-based teaching in immersion, integrating the formal aspects of French language teaching into content-based teaching and integrating culture, strategy training and language awareness into immersion curricula. Additional topics will include assessment of/for learning and effective technology integration in French Immersion.
OR: this course will be taught in French
PR: acceptance to the French Immersion Option or permission of the Office of Academic Programs
4161 The Teaching and Learning of Mathematics in the Intermediate and Secondary School (IS,ISI,ME) introduces teacher candidates to the principles, dispositions, and skills necessary to teach mathematics. Topics include: the nature of mathematical knowledge, learning principles, mathematics pedagogy, curriculum, instructional planning, and evaluation in mathematics.
4174 The Teaching and Learning of Science in the Intermediate and Secondary School I (IS,ISI) provides a context for teacher candidates to develop the knowledge, abilities, and dispositions to provide learners with the opportunity to develop multidimensional scientific literacy. Topics include: assessment and instruction, controversial issues in Science, curriculum planning, differentiating instruction in science, inquiry, information and communication technologies in science, learning theories, multicultural science education, scientific literacy, science-technology-societyenvironment, and student naive and alternative conceptions.
CR: the former ED 4170, the former ED 4171, the former ED 4270, the former ED 4271
LH: two hours per week
OR: WHMIS training. Information can be obtained from the Office of Academic Programs, Faculty of Education.
4175 The Teaching and Learning of Science in the Intermediate and Secondary School II (IS) provides a context for teacher candidates to develop a greater understanding of the nature of scientific knowledge and how it is generated, explore the rationale(s) for the inclusion of the nature of science as a goal of scientific literacy, analyse research that reports on teachers' and students' views about the nature of science, and examine the potential of a range of pedagogical approaches for helping all learners in science develop a greater understanding of the nature of science. Topics include: philosophy, history, and sociology of science; the nature of science (definitions and beliefs); and the nature of science in the classroom.
CO: ED 4174
4180 The Teaching and Learning of Social Studies in the Intermediate

[^2]and Secondary School I (IS,ISI,ME) examines the theory and practice of social studies education. Teacher candidates will investigate ways of applying the principles of effective teaching and learning in the social studies classroom. Topics include: the nature and purpose of social studies education, specific teaching strategies, and instructional planning and evaluation.

4181 The Teaching and Learning of Social Studies in the Intermediate and Secondary School II (IS) examines the separate disciplines of social studies. Topics include: the evolution and nature of social studies education, current issues and trends in the area and various teaching strategies and assessment techniques appropriate to the discipline.

## CO: ED 4180

4190 The Teaching and Learning of Physical Education in the Intermediate and Secondary School (IS,ISI,ME) applies the principles of effective teaching to the teaching and learning of physical education. Topics include the nature and purpose of physical education, an examination of the physical education curriculum, an analysis of quality daily physical education, approaches to teaching physical education, and evaluation of progress in physical education.
LH: two hours per week supervised practice teaching on-campus and/or in a school setting

4200 Curriculum Content and Curriculum Contexts I (ST) is designed to engage students in exploring, understanding, and applying theoretical foundations of curriculum and instruction practices specific to primary and elementary education learners, with attention to the political, social, and cultural contexts in which said curriculum content is enacted. Students will utilize sustained inquiry regarding the curricular core - literacy and numeracy - while including attention to each primary/elementary subject discipline. $\mathrm{CH}: 16$

4203 The Teaching and Learning of Religious Education in the Intermediate and Secondary School (IS,ME) applies the principles of effective teaching to the teaching and learning of religious education. Topics include formulating objectives, examining theories of faith and moral development, selecting and using resources, and evaluating learning.

4205 Religious Education in Primary and Elementary Grades (ME,PE) is an introductory study of aims and objectives, subject matter, curriculum materials, teaching methods, learning experiences, and evaluation for Religious Education courses.
CR: the former ED 2080
4206 Teaching Religious Education in the Primary and Elementary Grades (PE) is an introductory study of objectives, subject matter, curriculum materials, teaching methods and evaluation for primary/ elementary Religious Education courses when teaching/learning from a multi-faith perspective in a pluralistic society.
CH: 1
420T School Field Experience II (ST) is a second school field experience, integrated with coursework that is focused on inquiry into curriculum, teaching, and learning. Students spend two field days per week, in addition to one full week at the end of this Phase, for a total of 27 days.
AR: Attendance is required, With respect to holidays, students follow the
schedule of the school and not that of the University.
4240 An Introduction to the Exceptional Learner (IS,ISI,ME,PE) is an introduction to the nature of exceptionality in the student. Topics include an examination of special needs resulting from exceptionality, approaches to meeting the special needs, issues of exceptionality, and a consideration of selected categories of exceptionality.
CR: the former ED 3220, the former 3230, the former ED 4902
4242 Identification and Remediation of Learning Difficulties (IS,ISI,PE) examines the identification processes and remediation techniques appropriate for dealing with student learning difficulties. Topics include identification of learning difficulties, the process of program planning, and the application of teaching and learning strategies to specific subject areas.
PR: ED 4240 or the former 3220 or 3230
4260 Engaging the Adolescent Learner (IS,ISI,ME) considers the unique learning contexts and characteristics of learners through the span of adolescence, from early adolescence to young adulthood. It focuses on the intersection of psychological aspects of adolescence with biological, social and cultural, as well as cognitive and affective aspects in order to understand, to engage, and to effectively teach the adolescent learner. The implications of these unique periods for creating effective teaching and learning environments in both intermediate and secondary classrooms will be considered.
4300-4310 Special Topics Courses in Primary/Elementary (PE) will have topics to be offered announced by the Faculty of Education.

4350 Reading in the Content Areas (IS,ISI) examines the nature of reading in subject-specific areas such as history, biology, and mathematics. Topics include the role of the teacher in the teaching of content in different areas, evaluating vocabulary, grammar, usage and text structure for
instruction, and analysing the variety of strategies for reading, writing and studying.

4362 Sociological Perspectives on Teaching and Learning (ME,PE) is an examination of such social issues in education as poverty, child abuse, gender, ethnicity, and changes in the society and their implications for the nature and process of schooling. A study of social dimensions of education, including the content of education and the organization of teaching and learning. An analysis of students' experiences in the internship with regard to the above and other aspects of education the students might identify.
CR: the former ED 4360
PR: completion of the Professional Year
4381 Perspectives on Education (IS,ISI,ME,PE) examines educational theory, practice and policy from the disciplinary perspectives of philosophy, sociology, history and/or comparative education. Its aim is to foster an appreciation of the intrinsic value of these specific forms of inquiry contributions to contemporary understanding of educational enterprise. Topics include: ethical and epistemological considerations related to areas such as critical pedagogy, equal educational opportunity, educational reform, change and social justice.
4383 Philosophy of Teaching and Learning (ME,PE) examines a number of central philosophical concepts, assumptions and issues involved in the pursuit of teaching and learning in the schools. The aim of the course is to provide students with an understanding of the distinctive character of philosophical analysis as a reflective and critical practice that intends to promote professional excellence and personal well-being.
CR: the former ED 4380
PR: completion of the Professional Year
4390 Diversity, Social Justice, Teaching and Learning (IS,ISI) examines the intersection of multiple and inter-related forms of social and cultural diversity such as those related to social class, ethnicity, gender, ability, place, and sexual identity. The course explores ways to create more effective equitable learning environments through renewed, culturally responsive and respectful policy; critical, reflective and anti-discriminatory teaching; and more inclusive, socially critical curriculum.
4391 Social Justice, Equity and Education: An Introduction (PE) offers students an introduction to concepts and issues of social justice and equity as they relate to school and classroom culture and effective teaching and learning. Students will examine the basis of social inequity and its effects in edúcation locally and worldwide, explore meanings of social justice and determine its importance as an educational priority, and review and develop curriculum, pedagogy and policies to build more equitable and just classrooms and school communities.
CH: 2
4400 Curriculum Content and Curriculum Contexts II (ST) is designed to provide students with critical opportunities to inquire into what it means to teach knowledgeably and well, and to explore the relationships between curriculum knowledge, pedagogic practices, and understandings of student learning

440 T School Field Experience III (ST) is a 50 day teaching and learning experience, spanning twelve weeks during Phase III. Students will gradually progress to assuming near full responsibility for all aspects of classroom teaching and learning. The experience is supported through integrated coursework designed to complement and enhance the field experience.
AR: Attendance is required. With respect to holidays, students follow the schedule of the school and not that of the University.
CH: 10
4420 Legal and Moral Issues in Education (PE) examines educational law and sources of conventional morality for the purpose of clarifying individual stances on legal and moral issues. Topics include the nature and theoretical bases of law and morality in education, the legal foundations of the Canadian education system, the legal and moral rights and responsibilities of teachers and students, and teacher liability.
4425 Introduction to Educational Administration (PE) is an examination of the roles of various levels of government in Education; theories of administration; management as it relates to curriculum, organization, personnel, finance, and communication; and their implications for teachers in the Newfoundland context.
CR: the former Education 2410
PR: completion of the Professional Year
4427 Professional Leading and Learning in the School Organization (IS,ISI,PE) explores the theory and practice of school organization and its effect on teaching and learning and provide opportunities for teacher candidates to become reflective learners and teacher leaders. Topics include: parents and families, communities and schools; law and education; resources in education; policy and politics; teacher leadership, school and system administration; and the teaching profession.
CR: ED 4425
4500 Integration: Diversity and Identity (ST) provides an opportunity for

[^3]students to integrate the theoretical and practical understandings from the previous three phases and explore what it means to be ethically and culturally responsive to students and their communities while becoming a confident STEM educator.
CH: 17
4505 Transition Planning for Adolescents with Intellectual Disabilities (SE) focuses on the application of educational procedures relevant to successful post-secondary education, employment and community integration of adolescents and young adults with mild and moderate developmental disabilities. Appropriate senior high programming, life skills development, use of assistive technology and resource materials necessary for transition planning for this population will be reviewed.
CO: ED 3610
PR: ED 3610
4510 Inclusive Practices for Students with Mild Intellectual Disabilities (SE) gives consideration to the establishment of objectives; selection, development and review of materials; the use of various instructional strategies; assistive technology and the provision of appropriate experiences for the education of students with mild intellectual disabilities.
CO: ED 3610
PR: ED 3610
4515 Inclusive Practices for Students with Moderate Intellectual Disabilities (SE) focuses on inclusive educational practices for students with moderate intellectual disabilities. Emphasis will be placed on the development, implementation and management of a well-balanced individualized curriculum as articulated in an individual educational plan. Students will be expected to demonstrate fluency in the design of effective instructional strategies, including the use of assistive technology to maximize student's individual strengths across a variety of environments. CO: ED 3610
PR: ED 3610
4520 Inclusive Practices for Students with Behavioural Challenges (SE) examines programs and strategies for students with behavioural issues. These will include counseling skills, case conferences, structured learning environments, use of assistive technology and therapeutic interventions for specific behaviour problems. In addition, consideration will be given to collaboration with mental health practitioners and procedures to develop readiness for return to regular instructional programs.
CO: ED 3620
PR: ED 3620
4530 Inclusive Practices for Students with Learning Disabilities (SE) investigates specific teaching methods, use of assistive technology and programming practices as they pertain to reading, writing, language, mathematics, social skills, and metacognitive skills for students with identified learning disabilities.

## CO: ED 3630

4540 Inclusive Practices for Students with Speech/Language Disorders (SE) examines theoretically sound and research-based methods for the identification and remediation of speech and language concerns in children and adolescents. Topics include typical language development; nature of developmental concerns for both speech (articulation, voice and fluency) and language (receptive, expressive and phonetic awareness); social use of language; and use of assistive technology. Particular focus will be placed on current interventions/strategies and programs/models. The course is aimed at supporting teachers in developing effective individualized programs.

## 4541 Communication for the Deaf - inactive course.

4543 Inclusive Practices for Students with Hearing Loss (SE) - inactive course.

4600 Community Field Experience (ST) is designed to complement oncampus course work, particularly ED 4200, and to enhance student field experience. This four week placement is designed to enrich student understanding of their professional identity and responsibility in a broader context.
AR: Attendance is required. With respect to statutory holidays, students follow the schedule at their workplace settings and not that of the University.
CH: 4
4610 The Nature and Management of Stress (PE) studies the nature of stress as it is manifested in the teacher and the teaching profession, and provides approaches to coping effectively with the factors which are related to that stress. Topics include the nature of the human stress response, causes and symptoms of stress (personal and professional), selfassessment techniques, and a selection of approaches available to cope with the stress typically related to the roles and expectancies of teaching.
4620-4639 Institutes in Intermediate and Secondary Education (IS) will have topics announced by the Faculty of Education. These institutes may follow a schedule that falls outside of the normal teaching semester.
CH: 1

4640-4659 Institutes in Intermediate and Secondary Education (IS) will have topics announced by the Faculty of Education. These institutes may follow a schedule that falls outside of the normal teaching semester.
CH: 2
4660-4680 Institutes in the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education (ST) will have topics announced by the Faculty of Education. These institutes may follow a schedule that falls outside of the normal teaching semester. $\mathrm{CH}: 1$

4690-4699 Institutes in the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education (ST) will have topics announced by the Faculty of Education. These institutes may follow a schedule that falls outside of the normal teaching semester.

## CH: 2

4710 Recurring Issues in Post-Secondary Education (PS) identifies, analyses, and discusses major issues, practices and problems in PostSecondary Education provincially, nationally, and internationally.

## PR: ED 2710, ED 2720, and ED 2730

4730 Educational Programs and Practices in Industry and Labour (AL,PS) is a study of the various Rost-Secondary Education programs operated either wholly by industry and labour or jointly with educational institutions; apprenticeship, work experience and study programs, cooperative education, training-in-industry, training on-the-job, supervisory training, and management development.
PR: ED 2710, ED 2720, and ED 2730
4735 Practicum in Adult and Post-Secondary Education (AL, PS) is comprised of on-the-job supervised instructional activities designed to allow for the implementation of concepts, theory and principles of teaching, learning and curriculum in an adult and post-secondary education setting.
CR: the former ED 4450 and the former ED 4700
PR: ED 2700, ED 2710, ED 2730, ED 2740, ED 3280 or equivalent as determined by the Office of Academic Programs.
4750 Integrated Materials and Production Processes (ISI) provides technology education students with opportunities to examine current teaching and learning strategies applicable to intermediate and secondary technology education programs. The course will focus on advanced materials processing using Computer Numeric Control (CNC) devices. Students will receive practical instruction in the use of fluidic control systems that are used in many manufacturing processes. Topics include: CNC production processing, fluidic control systems, and application of the design process and portfolio development. This course may follow a schedule that falls outside of the normal teaching semester.
AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of Academic Programs.
4752 Teaching Robotics Systems (ISI) is designed to provide technology education students with an understanding of key concepts in robotic development and control applications. Students will complete practical activities that promote development of the skills necessary to deliver a comprehensive program in this area of study. Topics include: the study of electrical energy, analog and digital electronics; fabrication techniques; object oriented/event driven programming; and wireless robotic control over Internet Protocol (IP). This course may follow a schedule that falls outside of the normal teaching semester.
AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of Academic Programs.
4753 Teaching Residential Construction Technology (ISI) provides technology education students with opportunities to apply current teaching and learning strategies while developing the skill set necessary to deliver a comprehensive program in residential construction technologies. Topics include: shop and site safety, print reading and interpretation, basic residential framing techniques, installation of exterior construction features, installation of interior environmental applications, and energy control systems. This course may follow a schedule that falls outside of the normal teaching semester.
AR: attendance is required
OR: WHMIS training. Information can be obtained from the Office of Academic Programs.

4760-4780 Advanced Specialized Post-Secondary Education Technologies (PS) examines the theory and practice of selected advanced specialized Post-Secondary Education technical skills and their application to the laboratory, workshop and business office. Emphasis will be placed on innovative and emerging techniques in selected areas of business, industry, and the service occupations.
4830 Music Education Seminar (ME) examines, through inquiry, reflection and synthesis, the foundations of music education common to all levels and contexts of school music. The focus is the bridging of theory, philosophy, and practice in music education. Topics include current issues; challenges and opportunities in music education(provincial, national, and international);

[^4]interdisciplinary and integrated arts education; cultural pedagogy, diversity, and social justice in education; and teacher professional development. Additional modules will be designed to meet teacher candidates' needs and interests.

4901 Effective Teaching Strategies for Multi-grade/Multi-age Classrooms (PE) begins with a critical examination of traditional approaches to multi-grading. The main focus of the course will be to introduce teachers to the potential of adopting a multi-age approach in small schools which have of necessity grouped children of more than one age group and grade level together for instruction. This course will also examine the implications of implementing a philosophy of multi-age pedagogy in the primary, elementary and intermediate grades (K-9).

4950 Assessment for Learning (IS,ISI) introduces the theory and practice of evaluation and assessment in educational settings. Topics include the nature of classroom assessment; production, administration and evaluation of teacher-made tests and other assessment tools; product and performance assessment; grading and reporting communication of evaluation information; and the analysis and application of assessment data to instructional planning and the improvement of teaching.
CR: the former ED 4912
4970-4980 Special Topics Courses in Intermediate/Secondary (IS) will have topics announced by the Faculty of Education.

5000 The Teacher Development Seminar (IS,ISI) provides teacher
candidates with an opportunity to frame, conceptualize and articulate educational issues; (re)consider the purposes of education; reflect on teaching and learning; and develop and display artifacts that document learning, professional knowledge and practice, and teacher identity. Teacher candidates are expected to participate in a series of critical reflective seminars and workshops, and to create an electronic portfolio (e-portfolio). Topics include: critical reflection, professionalism and ethics in teaching, and teacher identity.
AR: attendance is required
OR: seminars, workshops and other professional development sessions
5001 The Teacher Development Seminar for Primary/Elementary (PE) provides teacher candidates with an opportunity to frame, conceptualize and articulate educational issues; (re)consider the purposes of education; reflect on teaching and learning; and develop and display artifacts that document learning, professional knowledge and practice, and teacher identity. Teacher candidates are expected to participate in a series of critical reflective seminars and workshops, and to create an electronic portfolio (e-portfolio). Topics include: critical reflection, professionalism and teacher identity, educational technology, social/emotional/mental health and student and school safety.
AR: attendance is required
OR: seminars, workshops and other professional development sessions



FACULTY OF ENGINEERING AND APPLIED SGIENCE

## FACULTY OF ENGINEERING AND APPLIED SCIENCE

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Naterer, G. F., B.Math., M.A.Sc., Ph.D. Waterloo, FCSME, FASME, FEIC, FCAE, P.Eng.; Professor, Mechanical Engineering
Up-to-date personnel listings are available at www.mun.ca/engineering/about/people.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.
For additional information and resources on academic and professional integrity in the Faculty of Engineering and Applied Science, see www.mun.ca/engineering/undergrad/academicintegrity.php.

## 3 Faculty Description

The Faculty of Engineering and Applied Science offers a co-operative undergraduate program leading to the degree of Bachelor of Engineering, as well as graduate programs leading to the degrees of Master of Engineering, Master of Applied Science, Master of Engineering Management, and Doctor of Philosophy. The Faculty encompasses five academic departments: Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, and Process Engineering. Through teaching, research and outreach, the Faculty of Engineering and Applied Science plays a critical role in the economic development of the Province, and graduates from the programs hold key positions in the major industrial developments in our Province. A growing number of our recent graduates are leading emerging high-technology companies and hold important positions in national and international industries and governments, contributing to the University's global impact. Research in the Faculty of Engineering and Applied Science has a strong focus on research and development opportunities associated with the general technological needs of our society. The Faculty maintains a very strong sense of identity and cooperation among students, faculty, and staff, and prides itself on its strong linkages with industry and the engineering profession.
Additional information regarding the Faculty of Engineering and Applied Science is available at www.mun.ca/engineering.
Students must meet all regulations of the Faculty in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information concerning scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Accreditation Status

Graduates of Memorial University of Newfoundland's engineering programs have been enjoying the benefits of full accreditation with the Canadian Engineering Accreditation Board (CEAB) since 1975. The undergraduate programs offered by The Faculty of Engineering and Applied Science are fully accredited by The Canadian Engineering Accreditation Board (CEAB) of The Canadian Council of Professional Engineers (CCPE) to 2020.

### 3.2 Objectives of the Bachelor of Engineering Degree Program

The objectives of the undergraduate program are to provide students an excellent academic experience and to equip graduates with the ability to solve a broad range of problems in our rapidly changing technological, economic and social environment. To this end, the Faculty is committed to educate graduates who have:

1. a strong foundation and knowledge in engineering fundamentals with a capacity to know how, when and where to use the knowledge in specific ways;
2. an ability to identify, formulate, analyse and solve engineering problems and a capacity to integrate material from more than one subject and to apply appropriate engineering principles to arrive at correct and effective solutions;
3. a comprehensive knowledge in the fundamentals of engineering practice, including an ability to use analytical techniques, experimental and laboratory skills and modern engineering simulation and design software tools;
4. a broad knowledge of the principles and skills in engineering design, development and management in global, cultural and business contexts;
5. a multidisciplinary view with an ability to work effectively as members of teams, composed of individuals from different disciplines and different professional cultures;
6. strong oral and written communication skills with a capacity to produce effective technical documents and to use current communication techniques and tools;
7. a culture of life-long learning with a capacity to engage in continuous self-improvement, personal enrichment and professional development; and
8. a broad sense of social, ethical and professional responsibility with a capacity to demonstrate an understanding and appreciation of the human dimension of technology and its impact on mankind.

### 3.3 Academic and Professional Ethics

The Faculty of Engineering and Applied Science supports the highest standards of academic and professional ethics. Ethical behaviour encompasses integrity, conduct, respect, and professionalism, and also means that we will take responsibility for our learning and pursue academic goals in an honest and engaged manner. It is the principles, values, and expectations that we espouse as members of the Faculty and future professional engineers.

When participating in coursework or representing the Faculty on work-terms, in competitions, at conferences, and other research and academic activities, we consider ethical behaviour as important as our performance, conduct, and quality of work. In decision-making, teamwork, and individual expression, we seek to understand the significance of justice, fairness, individual rights, and care in striving to achieve our own personal best.
Guidelines for Academic Integrity and an Engineering Student Code of Conduct are available at the Faculty of Engineering and Applied Science website.

## 4 Description of Program

The Bachelor of Engineering Degree at Memorial University of Newfoundland is a Co-operative Program in which regular full-time academic study is supplemented by four month periods of full-time work in positions related to the student's future career. The Bachelor of Engineering degree program is available in the following six majors: Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, and Process Engineering.
Engineering One, the first-year of the engineering program, comprises courses in mathematics and basic science (physics and chemistry), as well as courses covering engineering fundamentals which are common to each of the majors. The engineering courses in Engineering One introduce students to engineering problem-solving, analysis, design, communication, and teamwork. Students will develop an understanding of the different engineering specialities, as well as the interdisciplinary nature of engineering practice.
The specialized major programs of Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, and Process Engineering are offered in academic terms 3 through 8.
Electives can be tailored to meet the needs of those who plan to go straight into industry and those who wish to join the increasing number of our graduates who are pursuing advanced degrees.
All courses of the Faculty are designated by the abbreviation ENGI.

### 4.1 Program of Study

1. Courses in the engineering program are normally taken in Academic Terms as shown in the appropriate program table. Students must satisfy the criteria for promotion as described below under Promotion Regulations to remain in the Engineering program.
2. The Engineering Program consists of eight academic terms and four to six work terms. The first-year of the Engineering Program, known as Engineering One, forms a core that is common to all majors. All students must successfully complete the requirements of Engineering One prior to being promoted to Academic Term 3 as indicated under Promotion Regulations, Promotion Status (Engineering One).
3. To be eligible for registration for ENGI 001W in the Spring semester after completing Engineering One, students are expected to complete the prerequisite ENGI 200W in the Fall semester of Engineering One. All other Engineering One students are expected to complete ENGI 200W in the Winter semester of Engineering One.
4. In 1000 level Engineering courses, registration priority is given to students who have been admitted to Engineering One. Other students will be admitted to these courses only with the approval of the Associate Dean (Undergraduate Studies).
5. In these program regulations, including the program tables, wherever reference is made to English 1090 or the former English 1080 or Chemistry 1050, these courses may be replaced by courses deemed equivalent by the relevant academic unit.
6. Upon entering Academic Term 3, students begin to specialize in their academic program, in one of the following six majors: Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, or Process Engineering.
7. Upon entering Academic Term 6, students in the Computer Engineering and Electrical Engineering majors may choose to enter the Biomedical stream. Upon entering Academic Term 6, students in the Mechanical Engineering major choose one of five technical streams: Biomedical, Mechanics and Materials, Mechatronics, Petroleum, and Thermo-Fluids. Upon entering Academic Term 6, students in the Process Engineering major may choose one of two technical streams: Petroleum and Process.
8. Engineering courses are restricted to students who have been admitted or promoted to the appropriate academic term and major (e.g., Academic Term 3 for 3000 level courses, restricted by major; Engineering One for 1000 level courses). Other students will be admitted to these courses only with the approval of the Head of the appropriate Department for courses at the 3000 level and higher, or the Associate Dean (Undergraduate Studies) (or delegate) for 1000 level courses.
Some of the courses offered in academic terms 3 to 8 are taken by all Engineering students, others are offered for more than one major, but most technical courses in academic terms 3 to 8 are specific to the individual majors. Students should refer to the program descriptions for the detailed course requirements in each phase of their program.
9. Technical elective courses may be offered in terms other than those indicated in the program tables.
10. A student who has previously met a technical elective requirement in a given semester or wishes to defer it, may request an exemption or deferral by applying to the Head of the appropriate Department. A minimum grade of $60 \%$ is required for credit to be given towards a student's engineering program for any technical elective taken outside the normal Academic Terms as shown in the tables.
11. A minimum grade of $60 \%$ is required for credit to be given towards a student's engineering program for any course beyond Engineering One that is taken outside the normal Academic Terms as shown in the tables.
12. Transfer credit cannot be awarded for project or design courses in Academic Terms 7 or 8 of the Engineering program.
13. Students registered in Academic Term 7 of any Engineering major are eligible to apply for admission to a Master of Engineering Fast-Track Option (M.Eng.). The purpose of the Option is to encourage students interested in pursuing graduate studies to begin their graduate program while still registered as an undergraduate student. While enrolled in the Option, a student may complete some of the M.Eng. Degree requirements and potentially be able to graduate earlier from the M.Eng. Program. For further details and the regulations regarding the option, refer to the School of Graduate Studies, Regulations Governing the Degree of Master of Engineering.

### 4.2 Complementary Studies

1. The Complementary Studies component has been developed to make students aware of the function and responsibilities of the Professional Engineer in society and the impact that engineering in all its forms has on environmental, economic, social and cultural aspects of our society. This complements the technical expertise and communications skills developed and practised in all components of the program.
2. The Complementary Studies component is the same for all programs and consists of a minimum of 21 credit hours as follows:

- English 1090 or the former English 1080 or English 1020
- Engineering 3101
- Engineering 4102 must be completed before Term 6 in the Civil and Process majors, and must be completed before Term 7 in all other majors
- One 3 credit hour course that deals with the effect of technology on society and the environment. The course is to be chosen from Engineering 6101, Engineering 8151, Sociology 2120, Sociology 4107, Philosophy 2330 or the former 2571, or the former 2801
- Engineering 8152
- One Elective course of a 3 credit hour value chosen from the arts, humanities, social sciences and management and approved by the Associate Dean (Undergraduate Studies) of the Faculty of Engineering and Applied Science. List A is an approved list of courses maintained by the Office of the Associate Dean (Undergraduate Studies) of the Faculty of Engineering and Applied Science and is available at the website www.mun.ca/engineering.
- One Elective course of a 3 credit hour value chosen from the humanities and social sciences and approved by the Associate Dean (Undergraduate Studies) of the Faculty of Engineering and Applied Science. This course must be second-year or higher and it is intended to provide experience with the central issues, methodologies and thought processes of the humanities and social sciences. List B is an approved list of courses maintained by the Office of the Associate Dean (Undergraduate Studies) of the Faculty of Engineering and Applied Science and is available at the website www.mun.ca/engineering.

3. In order to graduate, the student must obtain an overall average of at least $60 \%$ in the 21 credit hours in Complementary Studies courses required in the program.

### 4.3 Bachelor of Engineering Majors

The Bachelor of Engineering degree program is available in the following six majors: Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, and Process Engineering.

### 4.3.1 Civil Engineering

www.mun.ca/engineering/civil


Civil Engineering deals with the planning, design, and construction of roads, railways, harbours, docks, tunnels, bridges, buildings, water supplies, hydroelectric power development, and sewage collection, treatment, and disposal systems.
The Civil Engineering major provides a broad introduction to the scientific principles and engineering techniques necessary for an understanding of the fundamental problems tackled by civil engineers.

### 4.3.2 Computer Engineering

www.mun.ca/engineering/ece
Computer Engineering is the design and analysis of computer systems applied to the solution of practical problems. It encompasses both hardware and software design in applications ranging from telecommunications and information systems to process control and avionics. Computer Engineering students learn the mathematics of discrete and continuous systems, the design of digital machines such as processors and memories, the fundamentals of software design, and the principles used in communications systems such as telephone networks and the Internet.
Computer Engineering shares many fundamentals with Electrical Engineering, which are covered in a common curriculum up to and including Academic Term 3. In recognition of the considerable diversity of careers available to computer engineers, students are given latitude in the final three academic terms to choose from a wide range of electives in various specialty areas. In Academic Term 6 , students may choose to enter the Biomedical stream which provides focus on electives relevant to the field of biomedical engineering. Making use of their elective course choices, students in the Computer Engineering major also have the opportunity to undertake a minor in Physics.

### 4.3.3 Electrical Engineering

www.mun.ca/engineering/ece
Electrical Engineering is a broad field encompassing the study of control systems, electromagnetics and antennas, power systems, electronics, communications, and computer hardware and software.
Electrical Engineering shares many fundamentals with Computer Engineering, which are covered in a common curriculum up to and including Academic Term 3. In recognition of the considerable diversity of careers available to electrical engineers, students are given latitude in the final three academic terms to choose from a wide range of electives in various specialty areas. In Academic Term 6, students may choose to enter the Biomedical stream which provides focus on electives relevant to the field of biomedical engineering. Making use of their elective course choices, students in the Electrical Engineering major also have the opportunity to undertake a minor in Physics.

### 4.3.4 Mechanical Engineering

www.mun.ca/engineering/mech
Mechanical Engineering is a highly diversified discipline encompassing the design, analysis, testing and manufacture of products that are used in every facet of modern society. Mechanical engineers analyse and design using the principles of motion, energy, and force to ensure that the product functions safely, efficiently, reliably, and can be manufactured at a competitive cost. This activity requires a thorough knowledge of materials, mathematics, and the physical sciences, and an ability to apply this knowledge to the synthesis of economical and socially acceptable solutions to engineering problems.
Mechanical Engineering is designed to provide students with a knowledge in the following four areas: design and dynamics, emphasizing solid mechanics, material science, dynamics, vibrations and machine component design; thermo-fluids, focussing on thermodynamics, heat transfer and fluid mechanics; mechatronics, dealing with electro-mechanical systems, control, robotics, and automation; and manufacturing/industrial, which encompasses CAD/CAM, production and operation management. In Academic Term 6 , students select one of five Technical Streams, which provide focus to the wide range of electives in various specialty areas in Academic Terms 7 and 8.

### 4.3.5 Ocean and Naval Architectural Engineering

www.mun.ca/engineering/ona
Ocean and Naval Architectural Engineering covers aspects of both naval architecture and ocean engineering. The Ocean and Naval

Architectural Engineering major is the only accredited undergraduate program specifically in naval architecture/ocean engineering in Canada. The major is designed to provide education to work in marine transport, ship and boat building, offshore engineering, submersibles design and many related marine areas. The undergraduate program is also a comprehensive preparation for graduate studies, research and consulting in ocean engineering.
Naval Architecture is primarily concerned with the design and construction of ships, offshore structures and other floating equipment and facilities. Ocean Engineering extends this focus to cover virtually all aspects of engineering related to the world's oceans. Topics including sub-sea systems and oceanographic science add core ocean engineering content to the program.
Students in the Ocean and Naval Architectural Engineering major also have the opportunity to undertake a minor in Mathematics.

### 4.3.6 Process Engineering

www.mun.ca/engineering/process
Process Engineering is a diversified discipline encompassing new development, design, optimization, and operation of sustainable processes for human needs. A process engineer uses biological, chemical, and physical processing of substances to modify their nature, their properties, and/or the composition of mixtures to produce useful products. This activity requires a thorough knowledge of materials, chemical and physical sciences, and mathematics and an ability to apply this knowledge in an economical and sustainable way to engineering development.
The Process Engineering major is designed to provide students with a specialization in the areas of minerals and metals processing, and downstream oil and gas processing. In Academic Term 6, a student may select to continue in the Process Stream with emphasis on sustainable processing or in the Petroleum Stream with emphasis on upstream oil and gas including petroleum geology, drilling, reservoir and production engineering. Throughout the major and within each area of specialization, emphasis is placed on green and clean processes which are environmentally benign and inherently safe. The goal of this major is to prepare graduates with knowledge and ability to implement this knowledge in a sustainable manner to larger-scale industrial development.

### 4.4 Work Terms

www.mun.ca/coop/programs/engineering
Engineering work term registration, grading, and tuition fee charges and payments are governed by the UNIVERSITY REGULATIONS in this Calendar and those outlined below. Engineering work term placement and opt-outs, conduct, and evaluation are governed by the Engineering Student Co-op Handbook which is available at www.mun.ca/coop/programs/engineering/enghandbook.pdf. Any changes to the Engineering Student Co-op Handbook require the approval of the Committee on Undergraduate Studies.
A student must complete successfully a minimum of four work terms in order to graduate with a Bachelor of Engineering degree. The Bachelor of Engineering degree offers the opportunity to complete up to five work terms beyond academic term 3. A student is expected to complete as many of these work terms as possible. A student who expects to complete the Engineering One requirements by the end of the Winter semester may apply to the Committee on Undergraduate Studies to undertake a work term during the Spring semester of Engineering One. Academic performance is the basis for approving such requests.
All students in academic terms 3 to 7 and any student approved to complete a work term during the Spring semester of Engineering One will be registered automatically during the regular registration period for the next scheduled work term unless the student has opted-out. A student may opt out of up to two work terms beyond Academic Term 3 by completing the procedures outlined in the Engineering Student Co-op Handbook. Opt outs normally are approved only in cases where a sfudent has successfully completed a minimum of four work terms.

### 4.4.1 General Information

- During work terms a student is brought into direct contact with the engineering profession, exposed to the work place setting, expected to assume ever-increasing responsibility in employment situations as the student's education advances, and introduced to experiences beyond the scope of those which could be provided in the classroom.
- A student is responsible for finding suitable work placements. The Office of Co-operative Education provides resources to assist in this process. A student who obtains a work placement outside the job competition must have that work placement approved by the Office of Co-operative Education prior to accepting it.
- A student who cannot meet the demands of the work term may be required by the Faculty to withdraw from the work term until the student can demonstrate an ability to continue in the program.
- Following the date of automatic registration for a work term, only a student who is registered for that work term will be permitted to continue in, or subsequently join, the job placement process and be approved to begin a work placement.
- A student in the job competition who refuses all job offers without the prior consent of the Office of Co-operative Education may be subject to penalties that may include the assignment of a grade of FAL (fail) for that work term.
- A student is not permitted to drop work terms without prior approval of the Committee on Undergraduate Studies, on the recommendation of the Office of Co-operative Education. A student who drops a work term without permission, or who fails to honour an agreement to work with an employer, will be assigned a grade of FAL (fail) for that work term.
- A student who conducts him or herself in such a manner as to cause termination from the job, will normally be assigned a grade of FAL (fail) for that work term.
- A student who is registered for a work term and who does not opt out from that work term must complete that work term successfully as a requirement for graduation.
- A student whô opts out from a work term is not permitted to work for a co-op employer during that work term.

A student who opts out from a work term and who works for a co-op employer during that work term may be considered to have committed an academic offence and will be subject to the penalties listed under the UNIVERSITY REGULATIONS, Academic Offences.

- A student in a work term who does not meet the deadlines stated by the Office of Co-operative Education for the submission of forms and documentation may be awarded a reduced grade for one or both components of that work term.
- The work term performance grade is assigned by the student's Coordinator based upon feedback from the employer and other information gathered from contact with the student.


### 4.4.2 Evaluation of Work Terms

Two components are considered in work term evaluation: work performance and a communications component, as described in the Engineering Student Co-op Handbook which is available at www.mun.ca/coop/programs/engineering/enghandbook.pdf.

Each component is evaluated separately and equally weighted resulting in one of the following classifications: Outstanding, Above Expectations, Satisfactory, Marginal Pass, Fail. Both evaluations will be recorded on the transcript. Overall evaluation of the work term will result in the assignment of one of the following final grades:

- Pass with distinction (PWD): To receive a PWD, a student must obtain an evaluation of Outstanding in both the communications and work performance components of the work term.
- Pass (PAS): To receive a PAS, a student must achieve an evaluation of Marginal Pass or better in the communications component and in the performance component of the work term.
- Fail (FAL): A student receiving a Fail in either the communications or performance component of the work term will receive a FAL. For promotion from the work term, a student must obtain PWD or PAS.


### 4.5 Continuing Engineering Education

The Faculty of Engineering and Applied Science has a firm commitment to continuing engineering education and offers a variety of seminars and short courses in St. John's and in other centres for practising engineers. For applicability of courses towards diplomas and certificates in Engineering, contact the Continuing Engineering Education office through the Faculty of Engineering and Applied Science website.

## 5 Admission/Readmission Regulations for the Faculty of Engineering and Applied Science

In addition to meeting UNIVERSITY REGULATIONS, students must meet the admission/readmission regulations for the Faculty of Engineering and Applied Science.

### 5.1 General Information

1. The Bachelor of Engineering program requires completion of a minimum of four co-operative education work terms. Prospective applicants should review the information about work term expectations at Work Terms.
2. Entry to the Bachelor of Engineering program is competitive for a limited number of placements. Meeting the minimum admission requirements does not guarantee acceptance into the Engineering program. The final decision on admission or readmission to the Bachelor of Engineering program rests with the Admissions Committee of the Faculty. Students are admitted to a common/general Engineering Program and are allocated a major in Academic Term 3.
3. Admission or readmission to the University does not necessarily constitute admission or readmission to the Bachelor of Engineering program.
4. The primary criterion used in reaching decisions on applications for admission or readmission is the judgement of the Admissions Committee on the likelihood of an applicant succeeding in the program.
5. Up to three positions per year in the Faculty of Engineering and Applied Science may be designated for applicants of Aboriginal ancestry who have met the admission requirements of the program. Applicants must send a letter of request at the time of application and provide documentation of Aboriginal ancestry.
6. The Admissions Committee allocates majors to students after promotion or readmission to Academic Term 3 of the Bachelor of Engineering program. Information on promotion from Engineering One is available at: Promotion Regulations, Promotion Status (Engineering One).

### 5.2 Application Forms and Deadlines

The application for admission or readmission to programs offered by the Faculty of Engineering and Applied Science is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial SelfService at www5.mun.ca/admit/twbkwbis.P WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

### 5.2.1 Admission

1. A student applying for admission to the Bachelor of Engineering program is required to submit an online application.
2. Applications for admission to Engineering One will normally be considered for admission to the Fall semester of each year. The deadline for submission of applications for admission to the Fall semester is March 1. The deadline for receipt of all documents pertaining to an application for the Fall semester is July 31.
3. Applications for admission to the Winter and Spring semesters will be considered for Memorial University of Newfoundland students only, who have successfully completed or are currently registered for two or more of the following courses: Mathematics 1000, Mathematics 1001, Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080. The deadline for application to the Winter semester is October 1 and to the Spring semester is February 1.
4. Applications received after the relevant deadline may be considered as time and space permit. The Admissions Committee for the Faculty will only consider applications that are complete.

### 5.2.2 Readmission

A student applying for readmission to Academic Term 3 and beyond is required to submit an online application. Applications will only be considered for applicants who have been previously admitted to the Academic Term for which readmission is applied.

1. Academic Term 3: The deadline for submission of an application for readmission to Academic Term 3 is March 1. Applicants will be considered for readmission to Academic Term 3 based on their Promotion Status (Engineering One).
2. Beyond Academic Term 3: The deadlines for submission of an application for readmission to an academic term beyond Academic Term 3 are: June 1 for the Fall semester, October 1 for the Winter semester, and February 1 for the Spring semester.
3. Applications received after the relevant deadline may be considered as time and space permit. The Admissions Committee for the Faculty will only consider applications that are complete.

### 5.3 Admission Requirements to the Faculty Program

An applicant must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate), Categories of Applicants, Admission

Criteria and Other Information. In addition to meeting these regulations, an applicant to the Bachelor of Engineering program in the following admission categories must meet the requirements as indicated below.

### 5.3.1 High School Applicants

- The Faculty of Engineering and Applied Science encourages applications for admission to the Bachelor of Engineering program from high school students who are new to post-secondary education, have an interest in pursuing an engineering degree and have achieved a good academic performance during high school. In addition to meeting the requirements under UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate), Applicants Who Have Followed the High School Curriculum of Newfoundland and Labrador, Admission Criteria, performance in advanced mathematics, chemistry, physics and English is of particular interest, and grades above $80 \%$ are normally required for consideration.
- Applicants who have not successfully completed either chemistry or physics but who have performed well in the other subjects may be considered.
- Applicants must meet the English language proficiency requirements as noted in English Language Proficiency Requirements.
- With careful planning the course load for the Engineering One requirements can be spread out over three semesters, to provide flexibility and additional time for a successful transition to the University and the Bachelor of Engineering program. However, as some courses are not offered in some semesters, a student should check with the appropriate academic unit to determine in which semester(s) each course is offered.
- An applicant who is not admitted to the Bachelor of Engineering program is encouraged to contact the University's Academic Advising Centre or the Office of the Associate Dean (Undergraduate Studies) to discuss an appropriate first-year program.


### 5.3.2 Memorial University of Newfoundland Applicants

- To be eligible for consideration for admission to the Bachelor of Engineering program, a student who is attending or has previously attended this University must have a cumulative average of at least $70 \%$, and obtained a grade of at least $70 \%$ in two or more of the following courses: Mathematics 1000, Mathematics 1001, Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080.
- Applicants must meet the English language proficiency requirements as noted in English Language Proficiency Requirements.


### 5.3.3 Transfer Applicants

- Transfer applicants are eligible to apply for admission to the Fall semester of Engineering One only, by the deadline of March 1.
- An applicant seeking admission to the Bachelor of Engineering program through transfer from recognized post-secondary institutions must have achieved a minimum overall average of $70 \%$ or GPA of 3.0 , or equivalent.
- Applicants must have obtained a grade of at least $70 \%$ in two or more courses that have been deemed equivalent for transfer credit purposes to: Mathematics 1000, Mathematics 1001. Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080.
- Where it is determined, at the time of admission, that an applicant has met all the requirements for promotion from Engineering One, advanced placement in Academic Term 3 or beyond, and requirements needed to complete the program, will be determined on an individual basis following transfer credit evaluation. A transfer applicant must complete a majority of the credit hours in the program at Memorial University of Newfoundland.
- Applicants must meet the English language proficiency requirements as noted in English Language Proficiency Requirements.


### 5.4 English Language Proficiency Requirements

Applicants who have not met the University specified requirements for study at an English Language Secondary or Post-Secondary Institution (see UNIVERSITY REGULATIONS, Admission/Readmission to the University (Undergraduate) - English Language Proficiency Requirements) are required to:

1. Possess higher than University minimum scores in one of the following standardized tests:
a. Test of English as a Foreign Language (TOEFL). A minimum score of 90, with at least 20 in each of Reading and Listening, and no less than 25 in Speaking and Writing, is required on the TOEFL;
b. International English Language Testing System (IELTS). A minimum overall band score of 6.5, with at least band 6.5 in each of Writing and Speaking, and 6.0 in Reading and Listening is required on the IELTS;
c. Canadian Academic English Language Assessment (CAEL). A minimum overall score of 70, with at least 60 per band, and no less than 70 in Writing and Speaking is required on the CAEL; and
2. Successfully complete an e-proctored English test or an interview.

### 5.5 Other Information

1. The Faculty will notify each applicant in writing regarding an admission decision to the Faculty program.
2. Decisions will be madê when grades are available for courses currently being completed. For current high school students decisions are based on current course registrations and final grades in courses previously completed.
3. A student admitted to the program in any term, without receiving credit for all courses required up to that level, must complete those courses successfully prior to graduation.
A student who has been admitted to one major offered by the Faculty and who wishes to change to another major within the Faculty must submit a new application for admission to the program. This application must be submitted to the Office of the Registrar by the appropriate, deadline date as outlined above in Application Forms and Deadlines and will be considered in competition with all other applications.
4. A student admitted full-time to the program and who declines the offer of admission or who fails to register for the appropriate courses during the term of admission will be considered withdrawn from the program. Such a student, if subsequently wishing to be considered for admission, must submit a new application for admission to the program. This application must be submitted to the Office of the Registrar by the appropriate deadline date in Application Forms and Deadlines above and will be considered in competition with other applications.

## 6 Program Regulations

### 6.1 Civil Engineering Program Regulations

### 6.1.1 Civil Engineering Major

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Civil Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 1 Civil Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 1 Civil Engineering Major.

Table 1 Civil Engineering Major

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Engineering One | Chemistry 1050 <br> English 1090 or the former 1080 <br> ENGI 1010, 1020, 1030, 1040 <br> Mathematics 1000, 1001, 2050 <br> Physics 1050, 1051 | Students who are expecting to complete the Engineering One <br> requirements by the end of the Winter semester may apply to <br> undertake a work term during the Spring semester. In this case, <br> the prerequisite course ENGI 200W is expected to be completed <br> during the Fall semester. All other students are expected to <br> complete ENGI 200W in the Winter semester of Engineering <br> One. |

In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under Description of Program, Complementary Studies.

| Fall <br> Academic Term 3 | $\begin{aligned} & \text { ENGI 3101, 3425, 3610, 3703, 3731, } \\ & 3934 \end{aligned}$ |  |
| :---: | :---: | :---: |
| Winter | 001W or 002W | , |
| Spring Academic Term 4 | ENGI 4312, 4421, 4425, 4717, 4723 |  |
| Fall | 001W or 002W or 003W | $\cdots$ a |
| Winter Academic Term 5 | ENGI 5312, 5434, 5706, 5713, 5723 |  |
| Spring | 002W or 003W or 004W | - |
| Fall <br> Academic Term 6 | ENGI 6322, 6705, 6707, 6713, 6749 |  |
| Winter | 003W or 004W or 005W (optional) |  |
| Spring Academic Term 7 | ENGI 7704, 7713, 7745 | 6 credit hours from: ENGI 7706, 7707, 7716, 7718, 7723, 7748 or other courses as specified by the Head of the Department of Civil Engineering |
| Fall | 004 W or 005 W (optional) or 006 W (optional) |  |
| Winter Academic Term 8 | $\text { ENGI 8152, 8700, } 8740$ | 9 credit hours from: ENGI 8705, 8708, 8713, 8717, 8751,other courses as specified by the Head of the Department of Civil Engineering |

### 6.2 Computer Engineering Program Regulations

### 6.2.1 Computer Engineering Major

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Computer Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 2 Computer Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 2 Computer Engineering Major.
- The requirements for a minor in Physics in the Computer Engineering program are detailed under Faculty of Science, Minor in Physics. Students wishing to undertake a minor in Physics must obtain approval from the Head of the Department of Electrical and Computer Engineering for their course selection.

Table 2 Computer Engineering Major

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Engineering One | Chemistry 1050 <br> English 1090 or the former 1080 <br> ENGI 1010, 1020, 1030, 1040 <br> Mathematics 1000, 1001, 2050 <br> Physics 1050, 1051 | Students who are expecting to complete the Engineering One <br> requirements by the end of the Winter semester may apply to <br> undertake a work term during the Spring semester In this case, the <br> prerequisite course ENGI 200W is expected to be completed during <br> the Fall semester. All other students are expected to complete ENGI <br> 200W in the Winter semester of Engineering One. |

In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under Description of Program, Complementary Studies.

| Fall <br> Academic Term 3 | ENGI 3101, 3424, 3821, 3861, 3891 Physics 3000 |  |
| :---: | :---: | :---: |
| Winter | 001W or 002W |  |
| Spring Academic Term 4 | ENGI 4424, 4823, 4854, 4862, 4892 | $3+\sqrt{0}$ |
| Fall | 001W or 002W or 003W |  |
| Winter Academic Term 5 | ENGI 5420, 5821, 5865, 5892, 5895 |  |
| Spring | 002W or 003W or 004W | * |
| Fall <br> Academic Term 6 | $\text { ENGI 6861, 6871, 6876, } 6893$ | Students in the Biomedical Stream: <br> Human Kinetics and Recreation 2311 <br> All other students: <br> 3 credit hours from: ENGI 6855 or other courses as specified by the Head of the Department of Electrical and Computer Engineering |
| Winter | 003W or 004W or 005W (optional) | $2$ |
| Spring Academic Term 7 | $\text { ENGI 7804, 7824, } 7894$ | Students in the Biomedical Stream: <br> Medicine 6250 <br> 3 credit hours from: ENGI 7825, 7854, 7864, 7952, other courses as specified by the Head of the Department of Electrical and Computer Engineering <br> All other students: <br> 6 credit hours from: ENGI 7825, 7854, 7864, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering |
| Fall | 004W or 005W (optional) or 006W (optional) |  |
| Winter Academic Term 8 | ENGI 8152, 8854, 8894 | Students in the Biomedical Stream: <br> Human Kinetics and Recreation 4703 <br> 6 credit hours from: ENGI 8814, 8821, 8868, other courses as specified by the Head of the Department of Electrical and Computer Engineering <br> All other students: <br> One free elective which must be a $3000-\mathrm{level}$ or higher Engineering course, or a 2000-level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Electrical and Computer Engineering. <br> 6 credit hours from: ENGI 7680, 8814, 8821, 8863, 8868, 8879, 8801-8805, or other courses as specified by the Head of the Department of Electrical and Computer Engineering |

### 6.3 Electrical Engineering Program Regulations

### 6.3.1 Electrical Engineering

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Electrical Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 3 Electrical Engineering Major.
- Work terms shall be taken in the order as set out in Table 3 Electrical Engineering Major.
- The requirements for a minor in Physics in the Electrical Engineering program are detailed under Faculty of Science, Minor In Physics. Students wishing to undertake a minor in Physics must obtain approval from the Head of the Department of Electrical and Computer Engineering for their course selection.

Table 3 Electrical Engineering Major

| Term | Required Course | Elective Courses |
| :--- | :--- | :--- |
| Engineering One | Chemistry 1050 <br> English 1090 or the former <br> 1080 <br>  <br>  <br>  <br> ENGI 1010, 1020, 1030, 1040 <br> Mathematics 1000, 1001, <br> 2050 <br> Physics 1050, 1051 | Students who are expecting to complete the Engineering One requirements <br> by the end of the Winter semester may apply to undertake a work term <br> during the Spring semester. In this case, the prerequisite course ENGI 200W <br> is expected to be completed during the Fall semester. All other students are <br> expected to complete ENGI 200W in the Winter semester of Engineering <br> One. |

In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under Description of Program, Complementary Studies.

| Fall <br> Academic Term 3 | $\begin{array}{\|l} \hline \text { ENGI 3101, 3424, 3821, 3861, } \\ 3891 \\ \text { Physics } 3000 \end{array}$ |  |
| :---: | :---: | :---: |
| Winter | 001W or 002W |  |
| Spring <br> Academic Term 4 | $\begin{aligned} & \text { ENGI 4430, 4823, 4841, 4854, } \\ & 4862 \end{aligned}$ |  |
| Fall | 001W or 002W or 003W |  |
| Winter Academic Term 5 | $\begin{aligned} & \text { ENGI 5420, ENGI 5800, 5812, } \\ & 5821,5854 \end{aligned}$ |  |
| Spring | 002W or 003W or 004W | - |
| Fall <br> Academic Term 6 | ENGI 6813, 6843, 6855, 6871 | Students in the Biomedical Stream: <br> Human Kinetics and Recreation 2311 <br> All other students: <br> 3 credit hours from: ENGI 6856, 6876, other courses as specified by the Head of the Department of Electrical and Computer Engineering |
| Winter | $\begin{aligned} & \text { O03W or } 004 \mathrm{~W} \text { or } 005 \mathrm{~W} \\ & \text { (optional) } \end{aligned}$ |  |
| Spring Academic Term 7 | ENGI 7803, 7824 | Students in the Biomedical Stream: <br> Medicine 6250 <br> 3 credit hours from: ENGI 7825, 7854, 7952, other courses as specified by the Head of the Department of Electrical and Computer Engineering <br> 3 credit hours from: ENGI 7811, 7825, 7844, 7854, 7855, 7856, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering <br> All other students: <br> 9 credit hours from: ENGI 7811, 7825, 7844, 7854, 7855, 7856, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering |
| Fall | 004 W or 005 W (optional) or 006W (optional) |  |
| Winter Academic Term | ENGI 8152, 8826, 8853 | Students in the Biomedical Stream: <br> Human Kinetics and Recreation 4703 <br> 6 credit hours from: ENGI 8814, 8821, other courses as specified by the Head of the Department of Electrical and Computer Engineering. <br> All other students: <br> One free elective which must be a 3000 -level or higher Engineering course, or a 2000 -level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Electrical and Computer Engineering. <br> 6 credit hours from: ENGI 5865, 7680, 8821, 8845, 8879, 8806-8809, other courses as specified by the Head of the Department of Electrical and Computer Engineering |

### 6.3.2 Minor in Applied Science - Electrical Engineering for Physics Majors and Honours

For Physics Majors and Honours students, a Minor in Applied Science - Electrical Engineering will consist of ENGI 3821 (or Physics 3550), ENGI 4854, Physics 3000, and 15 credit hours chosen from ENGI 3861, 4823, 4841, 4862,5800, and 6813 (or Physics 4500 ), or other courses subject to approval by the Head of the Department of Physics and Physical Oceanography and the Head of the Department of Electrical and Computer Engineering.
Completion of the Minor in Applied Science - Electrical Engineering does not qualify persons to hold the designation "Professional Engineer" as defined by various provincial acts governing the Engineering Profession.


### 6.4 Mechanical Engineering Program Regulations

### 6.4.1 Mechanical Engineering Major

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Mechanical Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 4 Mechanical Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 4 Mechanical Engineering Major.

Table 4 Mechanical Engineering Major

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Engineering One | Chemistry 1050 <br> English 1090 or the former 1080 <br> ENGI 1010, 1020, 1030, 1040 <br> Mathematics 1000, 1001, 2050 <br> Physics 1050, 1051 | Students who are expecting to complete the Engineering One requirements by the end of the Winter semester may apply to undertake a work term during the Spring semester In this case, the prerequisite course ENGI 200W is expected to be completed during the Fall semester. All other students are expected to complete ENGI 200W in the Winter semester of Engineering One. |
| In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under Description of Program, Complementary Studies. |  |  |
| Fall Academic Term 3 | ENGI 3101, 3424, 3901, 3911, 39 |  |
| Winter | 001W or 002W | (0) $)^{+}$ |
| Spring Academic Term 4 | ENGI 4430, 4901, 4932, 4934, 49 |  |
| Fall | 001W or 002W or 003W |  |
| Winter Academic Term 5 | ENGI 4421, 5911, 5931, 5952, |  |
| Spring | 002W or 003W or 004W |  |
| Fall <br> Academic Term 6 | ENGI 6901, 6928, 6929, 6933, 69 | Students in the Biomedical Technical Stream must also take Human Kinetics and Recreation 2311 in Academic Term 6. <br> Students in the Petroleum Technical Stream must also take ENGI 6602 in Academic Term 6 |
| Winter | 003W or 004W or 005W (optional) | - |
| Spring Academic Term 7 | $\text { ENGI 7926, } 7930$ | 6 credit hours from Technical Stream Required Courses, Academic Term 7 <br> For students in the Biomedical Technical Stream or Stream, one Technical Stream Required Course is replaced by Human Kinetics and Recreation 2311, taken in Academic Term 6. <br> For students in the Petroleum Technical Stream, one Technical Stream Required Course is replaced by ENGI 6602, taken in Academic Term 6. <br> 3 credit hours from Technical Stream Elective Courses. <br> One free elective which must be a 3000 -level or higher Engineering course, or a 2000 -level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Mechanical Engineering and must be completed before Academic Term 8. |
| Fall | 004W or 005W (optional) (optional) |  |
| Winter Academic Term 8 | ENGI 8152, 8926 | 3 credit hours from Technical Stream Required Courses, Academic Term 8 <br> 6 credit hours from Technical Stream Elective Courses |

### 6.4.1.1 Technical Streams

- A student must select one of the Technical Streams in the areas of Biomedical, Mechanics and Materials, Mechatronics, Petroleum, and Thermo-Fluids.
- Technical Stream required courses must be chosen according to the student's stream as outlined below in the Technical Stream Required Courses Table.
- Technical Stream elective courses must be chosen according to the student's stream as outlined below in the Technical Stream Elective Courses Table.
A student must choose one course in Academic Term 7 and two courses in Academic Term 8 according to the student's stream from the Technical Stream Elective Courses Table or other courses as approved by the Head of the Department of Mechanical Engineering.
- The selection of a course as a technical stream course from outside these lists requires the approval of the Head of the Department of Mechanical Engineering.

Technical Stream Required Courses Table

| Term | Biomedical | Mechanics and <br> Materials | Mechatronics | Petroleum | Thermo-Fluids |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Academic Term 6 | Human Kinetics and <br> Recreation 2311 |  |  | ENGI 6602 |  |
| Academic Term 7 | Medicine 6250 | ENGI 7911 <br> ENGI 7929 | ENGI 7929 <br> ENGI 7953 | ENGI 8691 | ENGI 7901 |
| Academic Term 8 | Human Kinetics and <br> Recreation 4703 | ENGI 8933 | ENGI 8946 | ENGI 8690 | ENGI 8903 |

Technical Stream Elective Courses Table

### 6.5 Ocean and Naval Architectural Engineering Program Regulations

### 6.5.1 Ocean and Naval Architectural Engineering Major

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Ocean and Naval Architectural Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 5 Ocean and Naval Architectural Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 5 Ocean and Naval Architectural Engineering Major.
- Ocean and Naval Architectural Engineering students may complete a minor in Mathematics as outlined under Faculty of Science, Mathematics, Minor in Mathematics.

Table 5 Ocean and Naval Architectural Engineering Major


### 6.6 Process Engineering Program Regulations

### 6.6.1 Process Engineering Major

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Process Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in Table 6 Process Engineering Major.
- Beginning in Academic Term 6, a student will follow either the Process Stream or Petroleum Stream with elective course options as outlined in Table 6 Process Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 6 Process Engineering Major.
- Process Engineering students may complete a minor in Chemistry as outlined under Faculty of Science, Chemistry, Minor in Chemistry.

Table 6 Process Engineering Major

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Engineering One | Chemistry 1050 <br> English 1090 or the former 1080 <br> ENGI 1010, 1020, 1030, 1040 <br> Mathematics 1000, 1001, 2050 <br> Physics 1050, 1051 | Students who are expecting to complete the Engineering One requirements by the end of the Winter semester may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W is expected to be completed during the Fall semester. All other students are expected to complete ENGI 200W in the Winter semester of Engineering One. |
| In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under Description of Program, Complementary Studies. |  |  |
| Fall <br> Academic Term 3 | Chemistry 1051 ENGI 3101, 3424, 3600, 3901, 3911 |  |
| Winter | 001W or 002W |  |
| Spring Academic Term 4 | ENGI 4430, 4602, 4621, 4625, 4661 |  |
| Fall | 001W OR 002W OR 003W |  |
| Winter Academic Term 5 | ENGI 4421, 5601, 5602, 5671, 5911 | - |
| Spring | 002W or 003W or 004 W |  |
| Fall <br> Academic Term 6 | ENGI 6621, 6631, 6671, 6661 | 3 credit hours from Technical Streams courses, <br> Academic Term 6 |
| Winter | 003W or 004W or 005W (optional) |  |
| Spring Academic Term 7 | $\text { ENGI 7621, 7640, } 8677$ | 6 credit hours from Technical Streams courses, Academic Term 7 |
| Fall | 004W or 005W (optional) or 006W (ous |  |
| Winter Academic Term 8 | ENGI 8152, 8640 | One free elective which must be a 3000-level or higher Engineering course, or a 2000-level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Process Engineering. <br> 9 credit hours from Technical Streams courses, Academic Term 8 |

### 6.6.1.1 Technical Streams

- Technical Streams are available in the areas of Petroleum and Process
- A student may experience scheduling difficulties if courses are selected from more than one Technical Stream.
- The selection of a course as a technical stream course from outside these lists requires the approval of the Head of the Department of Process Engineering.

Petroleum Technical Stream

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Academic Term 6 | ENGI 6602 |  |
| Academic Term 7 <br> A student must choose two courses from <br> Academic Term 7. | ENGI 8692 | ENGI 8671, 8691 |
| Academic Term 8 <br> A student must choose three courses from <br> Academic Term 8. | ENGI 8694 | ENGI 8670, 8676 |

### 6.6.2 Minor in Applied Science - Process Engineering for Chemistry Majors or Honours Students

For Chemistry Majors or Honours students, a Minor in Applied Science - Process Engineering will consist of Chemistry 1051, ENGI 3600, 4621, 4602 (or Chemistry 2301), 4625, and 4961 and 6 credit hours chosen from ENGI 5601, 6621, 6631, 6651, 7621, and 8671.
Completion of the Minor in Applied Science. Process Engineering does not qualify persons to hold the designation "Professional Engineer" as defined by various provincial acts governing the Engineering Profession.

### 6.7 Advanced Standing

Students are occasionally admitted to later terms in Engineering from other institutions. Such entry is normally based on a detailed analysis of the student's record and is handled on a case-by-case basis. Such students should contact the Office of the Associate Dean (Undergraduate Studies).

## 7 Promotion Regulations

### 7.1 General Information

1. Engineering One consists of eleven required courses: Mathematics 1000, Mathematics 1001, Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080, ENGI 1010, ENGI 1020, ENGI 1030 and ENGI 1040.
2. Students are assigned majors for Academic Term 3, which is offered in the Fall semester only
3. In addition to meeting the promotion regulations for the Faculty of Engineering and Applied Science, all students must meet the general academic regulations (undergraduate). For further information refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).
4. Success in the programs depends on meeting the requirements of both academic terms and work terms.

### 7.2 Promotion Status (Engineering One)

1. The minimum requirements for promotion to Academic Term 3 are:
a. an Engineering One promotion average of at least $65 \%$. The promotion average is defined as the overall average of the following nine courses: Mathematics 1001, Mathematics 2050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080, ENGI 1010, ENGI 1020, ENGI 1030 and ENGI 1040; and
b. a grade of at least $55 \%$ in each of the above nine courses.
2. Meeting the minimum Engineering One promotion requirements does not guarantee promotion to Academic Term 3.
3. A student who meets the promotion requirements and has an Engineering One promotion average of at least $70 \%$ will be guaranteed promotion to Academic Term 3.
4. A student who meets the promotion requirements and has an Engineering One promotion average of less than $70 \%$ will be promoted to Academic Term 3 as Faculty capacity permits.
5. To be considered for promotion to Academic Term 3 no required course in Engineering One may be failed more than once. If a student fails one of the Engineering One courses more than once the student will be withdrawn from the Engineering program.
6. In order to remain in the Engineering program, a student admitted to Engineering One must complete the requirements for promotion to Academic Term 3 before the end of the academic year following the academic year of admission. Therefore, a student in

Engineering One will have at most two years to complete all requirements for promotion to Academic Term 3.
7. A student who fails to meet the requirements for promotion to Academic Term 3 before the end of the academic year following the academic year of admission will be withdrawn from the Engineering program.
8. Promotion from Engineering One guarantees admission to one of the six majors, but not necessarily to a student's preferred major. The Faculty reserves the right to establish the capacity of each major. The Faculty also reserves the right to guarantee admission into a particular major at the time of admission into the Engineering program. A student promoted to Academic Term 3 with an Engineering One promotion average of $75 \%$ and greater is guaranteed a preferred major
9. A student is required to submit a Major Preference form, indicating a preferences for major in rank order, by April 1 in the academic year in which the student expects to complete the requirements of Engineering One.

### 7.3 Promotion Status (Beyond Engineering One)

A student's eligibility for promotion from semesters beyond Engineering One will be determined at the end of each term. In order to be considered for promotion a student must complete all courses required in that Academic term. Promotion from each academic term will be based upon the student's Promotion Average for the semester. The Promotion Average, which will appear on the transcript, is calculated to be the overall average of required courses completed in the academic term excluding complementary studies and free elective courses. Promotion from work terms will be determined based upon the grade awarded in that work term.
A student's promotion status will be determined beyond Engineering One and at the end of each academic term in one of the following three categories:

### 7.3.1 Clear Promotion

Clear Promotion means that a student can proceed to the next term without restrictions.

1. A student completing or repeating an academic term will receive a Clear Promotion by obtaining a promotion average of at least $60 \%$ and a numeric grade of at least $50 \%$ in each of the courses included in the calculation of the promotion average in that academic term.
2. A student completing a work term will receive a Clear Promotion by obtaining an overall grade of PAS or PWD in that work term.

### 7.3.2 Probationary Promotion

A student who is not eligible for Clear Promotion from an academic term but who achieves a promotion average of at least $60 \%$ in that term will be granted Probationary Promotion.

1. A student's Probationary Promotion status will be reflected on the University Transcript under the Promotion Average for the semester
2. A student with Probationary Promotion from an academic term may continue to the subsequent work term under the condition that entry into the next academic term is not allowed until the student's status is changed to Clear Promotion.
3. A student with Probationary Promotion at the end of the final academic term will not be recommended for graduation until the student's status is changed to Clear Promotion
4. To change Probationary Promotion to Clear Promotion for an academic term the student must satisfy the Faculty that he or she is competent in the subject of the ENGI course(s) in which the student has failed to achieve $50 \%$. This will normally entail reexamination(s) prescribed by the Faculty as a condition of probation, after which the student will be declared to have passed or failed a test of competency in the subject(s) concerned. No numerical grade will be assigned in a re-examination. Upon passing a reexamination, the original grade submitted for the course will be changed to PAS, but the promotion average will not change and a note of the original grade will remain on the transcript
5. Re-examination will be at a time determined by the Faculty, normally in the first week of the subsequent academic term. A reexamination is cumulative in nature, covers the entire course and, as such, may be different in scope from the original final examination for that course.
6. In order to qualify for a re-examination in a failed ENGI course, a student must obtain a grade of at least $40 \%$ in that course and must have completed any laboratory and/or project work in that course. Re-examinations are not normally available for senior project courses or for other courses in which the final examination is worth less than $40 \%$ of the grade.
7. A student who has failed the communications component of a work term and who, in the opinion of the Office of Co-operative Education, can benefit from a remedial program, may be permitted an extension of time, not to exceed the end of the registration period of the subsequent academic term, to complete the requirements of the work term.
8. A student will be permitted to write a maximum of four re-examinations for the duration of the student's program.
9. To change Probationary Promotion to Clear Promotion for an academic term the student must repeat successfully any non-ENGI course(s) which count towards the promotion average and in which the student has failed to achieve $50 \%$.
10. A student may apply for a deferred re-examination on a similar basis to the deferral of a final examination.
11. A student with Probationary Promotion who does not complete a prescribed re-examination will be deemed to have failed that reexamination. Upon failing a prescribed re-examination the original course grade will be retained and a comment confirming failure of the re-examination will be added to the transcript.
12. A student with Probationary Promotion who fails in the re-examination(s) or who does not qualify for the re-examination(s) must repeat the corresponding failed course(s) successfully in order to change the Probationary Promotion to Clear Promotion.
13. A student with Probationary Promotion from any of Academic Terms 3 to 7 who does not meet the requirements for Clear Promotion by the end of the registration period for the subsequent academic term must withdraw from the program. Permission to register for ENGI courses to be repeated may be subject to the approval of the Faculty. Such students may apply for readmission to the Bachelor of Engineering program when they have satisfied the requirements for Clear Promotion.

### 7.3.3 Promotion Denied

Promotion Denied status is awarded when a student does not meet the requirements for Clear Promotion or Probationary Promotion. The student's Promotion Denied status will be reflected on the University Transcript under the Promotion Average for the academic term.

1. A student with Promotion Denied status will be required to withdraw from the Faculty.
2. A student with Promotion Denied status may apply for readmission to the program after two semesters. Subject to space being available, a student will be readmitted into the term from which promotion was denied. An academic term may be repeated only
once, and not more than two academic terms may be repeated in the entire program.
3. A student who is denied promotion for failing a work term may be considered for readmission. A student readmitted under this clause must successfully complete four work terms prior to graduation.
4. A work term may be repeated only once, and not more than two work terms may be repeated in the entire program.
5. A student who is denied promotion from an academic term will be required to repeat all required courses in which the student obtained a numeric grade of less than $60 \%$ in that term. In addition, the Admissions Committee may design a remedial program to address the student's specific area(s) of weakness. A technical elective course in which the student obtained a numeric grade of less than $60 \%$ may be replaced by a course acceptable in the student's program.
6. A student who is denied promotion from an academic term may not continue to the subsequent work term unless both the employer and the Office of Co-operative Education grant permission.
7. A student with Promotion Denied status at the end of the final academic term will not be recommended for graduation until the student's status is changed to Clear Promotion.

### 7.4 Other Information

1. The appropriate Department will make a recommendation to Faculty Council on each student's promotion status at the end of each of Academic Terms 3 to 8.
2. To be recommended for graduation, a student must have Clear Promotion from Academic Term 8, must have successfully completed the four mandatory work terms and any elective work terms undertaken and must have an average of at least $60 \%$ in the 21 credit hours in complementary studies as described in Description of Program, Complementary Studies.
3. The Office of Co-operative Education will make a recommendation to Faculty Council on each student's promotion status at the end of each work term.
4. A student must have completed at least one work term successfully, in order to be promoted to Academic Term 5.
5. A student must have completed at least two work terms successfully, in order to be promoted to Academic Term 6.
6. A student must have completed at least three work terms successfully, in order to be promoted to Academic Term 7.
7. A student must have completed four work terms successfully, in order to be promoted to Academic Term 8.
8. A student denied promotion shall be permitted only one readmission to the same term and a total of no more than two readmissions to the Faculty.
9. A student is permitted one failure only in each of the courses required in Engineering One.
10. No course required in any of Academic Terms 3 to 8 of the program may be attempted more than twice.
11. A student may be required to withdraw from their program at any time, if, in the opinion of the Faculty, the student is unlikely to benefit from continued attendance.

## 8 Graduation

Upon meeting the qualifications for any of the programs of the Faculty of Engineering and Applied Science a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation "form. This form may be obtained on-line at the Memorial Self-Service at www3.mun.ca/admit/twbkwbis.P WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 9 Waiver of Faculty Regulations

Every student has the right to request a waiver of Faculty regulations. Students seeking a waiver of University academic regulations should refer to the UNIVERSITY REGULATIONS - General Academic Regulations Undergraduate, Waiver of Regulations.

1. The Faculty Council reserves the right in special circumstances to modify, alter, or waive any Faculty regulation in its application to individual students, where merit and equity so warrant in the judgment of the appropriate Committee of the Faculty Council.
2. All requests must be submitted to the Office of the Associate Dean (Undergraduate Studies) for submission to the appropriate Committee of the Faculty. Students must submit their request in writing. Medical and/or other documentation to substantiate the request must be provided.
3. Requests for waivers of admission requirements will be submitted to the Admissions Committee who will make a recommendation for action to the Committee on Undergraduate Studies of the Faculty.
4. Requests for a waiver of a course(s) required in academic terms 3 to 8 should be made prior to the commencement of the academic term and will be considered by the Committee on Undergraduate Studies, upon recommendation of the Head of the appropriate Department.
5. Requests for a waiver of a work term will be considered by the Committee on Undergraduate Studies upon recommendation of the Office of Co-operative Education. Any waiver granted does not reduce the total number of work terms required for the degree below an absolute minimum of three.

## 10 Appeal of Regulations

### 10.1 General Information

In accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Appeal of Decisions, the Appeals Committee of the Faculty of Engineering and Applied Science considers appeals of promotion, admission and readmission decisions related to undergraduate programs offered by the Faculty of Engineering and Applied Science. A student wishing to appeal related decisions should review the General Academic Regulations (Undergraduate), Appeal of Decisions carefully. Individual course grades may not be appealed as a student will normally have had the opportunity of contesting grades immediately after notification as outlined under UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Appeal of Decisions, Route for Questioning Grades.
All appeals must be directed to the Secretary of the Appeals Committee, c/o the Undergraduate Studies Office of the Faculty of Engineering and Applied Science. All letters of appeal must state clearly and fully the grounds for the appeal and the resolution being sought.

### 10.2 Appeals of Admission Decisions

An appeal of a decision concerning admission or readmission must be made in writing within fourteen days of the date of notification of the decision to the Secretary of the Appeals Committee, c/o the Undergraduate Studies Office of the Faculty of Engineering and Applied Science.

### 10.3 Appeals of Promotion Decisions

1. Appeals of promotion decisions must be submitted to the Secretary of the Appeals Committee, c/o the Undergraduate Studies Office of the Faculty of Engineering and Applied Science within one month of the notification by the Faculty of the promotion decision. Appeal submissions shall contain the following:

- Student name,
- Current address and telephone number,
- Memorial University of Newfoundland e-mail address,
- Student ID number
- A copy of the decision giving rise to the appeal,
- A description of the matter under appeal,
- The grounds of appeal,
- Supporting documentation; and
- The resolution being sought.

2. When a student has requested a re-read of an examination paper which may affect an appeal, that appeal must nevertheless be submitted within one month of the issue of the original decision and consideration of the appeal will be delayed until the result of the re-read is available.
3. A student may request additional time to gather supporting documentation. Such a request will not be unreasonably denied.
4. For assistance in the appeals process, a student is advised to consult with the Associate Dean (Undergraduate Studies) whose advice shall include the provision of a list of others within the Faculty and elsewhere in the University who can advise the student during the appeals process.
5. A student is encouraged to review UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions, Information Required in Letters of Appeal.
6. The terms of reference for the Appeals Committee of the Faculty of Engineering and Applied Science, including procedures followed by the Committee, are posted on the Faculty website at www.mun.ca/engineering.

### 10.4 Other Appeals

Any student whose request for waiver of Faculty regulations has been denied has the right to appeal. For further information refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 11 Course Descriptions

All courses of the Faculty are designated by ENGI.

### 11.1 Work Terms and Non-Credit Courses

001W Engineering Work Term 1 provides opportunity for an introductory experience in an engineering work environment. Students are expected to learn, develop and practise the basic standards of behaviour, discipline and performance normally found in a professional work environment. They are expected to learn the basics of technical writing and to become familiar with the various communications tools used in an engineering work environment.

## LC: 0

PR: ENGI 200W
002W Engineering Work Term 2 requires students, under supervision, to contribute positively to the engineering and problem solving processes practised in the work environment. They are expected to set objectives, take direction, work independently as required, learn professional behaviours, and function as effective team members. An ability to investigate workrelated concepts should be demonstrated. Students should become better familiarized with the use of engineering tools, data analysis, prioritization of assignments, and effective communication of technical information.

## CH: 0 <br> C: 0

ENGI 001W, ENGI 3101
003W Engineering Work Term 3 requires greater participation in the students' engineering discipline. They become more experienced and proficient in problem solving and use of appropriate design processes. They should demonstrate speed and accuracy in their work, accept greater responsibility and be able to function with less direct supervision. Good judgement, increased initiative and improved analytical skills are expected to develop at this stage. Students should better appreciate the attitudes, responsibilities, and ethics expected of engineers.

CH: 0
LC: 0

004W Engineering Work Term 4 requires students to engage in complex facets of engineering. Participation in their selected engineering discipline is expected. Students should be able to contribute independently to design and/or problem solving processes, understand their responsibility to society and the environment, understand project management strategies, think critically, and use engineering tools appropriately. The level of responsibility should reflect their academic background and experience. Good teamwork skills are expected and leadership skills may be developed.

## CH: 0

PR: ENGI 003W
005W Engineering Work Term 5 requires students to continue to engage in advanced facets of engineering. Participation in their selected engineering discipline is expected. Students should apply skills independently in engineering analysis, contribute to a safe work environment, and utilize engineering tools while understanding their limitations. They will contribute significantly to design and/or problem solving processes, and demonstrate project management and leadership abilities. The level of responsibility should be commensurate with their academic background and experience.
CH: 0
LC: 0
PR: ENGI 004W
006W Engineering Work Term 6 requires students to further engage in various advanced facets of engineering. Participation in their selected engineering discipline is expected. Students should gain further appreciation of the use and importance of acquired analytical skills in engineering analysis, and significantly contribute to design and/or problem solving processes. The level of responsibility should be commensurate with their academic background and experience. Work scope should be mostly independent, with longer timelines, and with the possibility of leadership opportunities.
CH: 0

[^5]
## \section*{LC: 0} <br> PR: ENGI 005W

200W Work Term Preparation and Professional Development introduces the Co-operative Education process and professional development, and prepares the student for work terms. This course is designed to assist students to apply for, interview and obtain the first work term, as well as to be prepared for a professional work environment. It is a one semester course offered during the Fall and Winter semesters of Engineering One, prior to a student's first work term competition. This course is graded PAS or FAL.

AR: attendance is required
CH: 0
LC: as scheduled

### 11.2 Engineering One Courses

1010 Engineering Statics is the first course in Engineering mechanics. Forces and moments are described with vector algebra, leading to a description of the equilibrium conditions for particles and solid bodies. The importance of free body diagrams is highlighted. This knowledge is then applied to the analysis of trusses, frames and machines. Additional topics include an examination of friction and the concepts of centre of force, centroids and second moments of area.
CO: Mathematics 1000
CR: the former ENGI 1313
OR: tutorial 1 hour per week
PR: Level III Physics or Physics 1020 or equivalent
1020 Introduction to Programming is an introduction to algorithmic problem solving techniques and computer programming, including basic program control structures (sequence, call, branch, loop) and data representations, functional decomposition, and design by contract. Exercises and examples are drawn from a variety of engineering disciplines and are implemented using a standard modern programming language.
CR: the former ENGI 2420
LH: at least four 2-hour sessions per semester
PR: eligibility to register for Mathematics 1000
1030 Engineering Graphics and Design provides two complementary competencies. Firstly, it provides an introduction to the fundamentals of graphic communication, including orthographic projections, three dimensional pictorials, sectioning and dimensioning. Both sketching and CAD are utilized. Secondly, the course introduces students to standard design methodologies. The graphics and design competencies are reinforced through lab and project exercises.
LH: 3
PR: eligibility to register for Mathematics 1000
1040 Mechanisms and Electric Circuits is offered in two serial modules, including laboratory and workshop practice, and a team project to expose students to the concept of system integration involving electrical and mechanical systems. The electrical module provides an introduction to dc circuits, with an analysis of dc circuits used in control, measurement and instrumentation systems. The mechanism module provides an introduction to machine components such as belts, pulleys, gears, and simple linkages. The laboratory and workshop component introduces students to hands-on practice in basic laboratory instruments, tools and safety procedures. A team project involves the construction, assembly and testing of a simple mechanism.

LH: 3
PR: Level III Physics or Physics 1051 (which may be taken concurrently) and Mathematics 1000 (which may be taken concurrently).

### 11.3 Academic Term 3 Courses

3001 Ocean/Naval Design introduces design and operation for ships and marine structures. Technology evolution in ship and offshore structures is reviewed, emphasizing service needs. Structural concepts, materials and construction methods are examined, including design for manufacturing. The design spiral and trade-offs between design characteristics are explored and modelling methods as tools in the design process are introduced. There is a minimum of six laboratory sessions including ship tours, a design project or research paper.
LH: at least six 3-hour sessions per semester
3054 Ocean Engineering Hydrostatics is an introductory course to naval architecture and marine engineering. It discusses the basic principles of the statics of rigid floating or submerged structures. These include: ships, offshore platforms and submersibles. Methods of analysis of the hydrostatics, stability and trim, damage stability and the statics of mooring systems are introduced. Applications are also discussed.

LH: at least nine 3-hour sessions per semester
PR: ENGI 1010
3101 Engineering Professionalism I examines issues associated with professional engineering practice and with functioning effectively in the workplace. Topics include communication, workplace and professional
ethics, information literacy, equity, gender, diversity, and occupational health and safety (including first-aid). This is a writing-intensive course with a critically-reflective component. Current accreditation graduate attributes are introduced for further development throughout the program.
PR: Science 1807 and Science 1808
3424 Engineering Mathematics includes ordinary differential equations of first order and first degree; linear ordinary differential equations of higher order, methods of undetermined coefficients and variation of parameters; applications to electric circuits and mass-spring systems; Laplace transforms; partial differentiation; convergence of series; Taylor and binomial series; remainder term; and an introduction to Fourier series.
CH: 4
CR: the former ENGI 2422
LC: 4
OR: tutorial 1 hour per week
PR: Mathematics 1001, Mathematics 2050
3425 Mathematics for Civil Engineering I includes sequences \& series, functions of a single parameter, conic sections, polar coordinates, partial differentiation, multiple integration, introduction to first order ordinary differential equations.
CH: 4
LC: 4
OR: tutorial 1 hour per week
PR: Mathematics 1001 and 2050
3600 Introduction to Process Engineering familiarizes students with the principles and the practical aspects of organic, inorganic, and biochemical processes including the major unit operations and equipment used. It emphasizes process flow sheeting, process variable identification, component and overall material balances, and process design. The course uses extensive examples from industrial processes. In laboratory sessions students are introduced to the laboratory scale process equipment and use HYSYS software to study process characteristics.
CO: Chemistry 1051
LH: at least five 2 -hour sessions per semester
3610 Earth Sciences for Civil Engineering is an introduction to basic concepts in geology with emphasis on applications in Civil, Geological, Mining and Environmental Engineering through the study of basic concepts and case histories. It includes the study of rocks, minerals, sediments and their physical properties in laboratory exercises.
LH: 3
3703 Surveying and Geomatics includes distance, elevation, and angle measurements; horizontal curves; plane survey calculations; area and volume computations; introduction to photogrammetry; global positioning (GPS) and geographical information systems (GIS). A surveying field school to introduce students to the use of surveying equipment and mapping will be held in the first two weeks of the term.
LH: nine 3-hour sessions per semester
OR: 18 hours of field school which occurs in the first two weeks of the semester
3731 Materials for Construction includes structure of metals and nonmetals; deformation of metals; strengthening mechanisms in metals; concrete and cementitious materials; admixtures; iron and steel; brick masonry; concrete masonry; mortar grout and plaster; wood and wood products.
LH: nine 3-hour sessions per semester
3821 Circuit Analysis begins with a review of basic circuit analysis including dependent sources, then considers wye-delta transformation, bridge circuits, transient analysis of first- and second -order circuits, sinusoidal steady state analysis, phasor diagrams, sinusoidal steady-state power, complex power and maximum power transfer.
CO: ENGI 3424. Students completing a Minor in Applied Science Electrical Engineering may complete Mathematics 2260 as the corequisite instead of ENGI 3424.
CR: Physics 3550
LH: eight 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: Mathematics 1001, Mathematics 2050, ENGI 1040. Students completing a Minor in Applied Science - Electrical Engineering may complete Physics 2055 as the pre-requisite instead of ENGI 1040.

3861 Digital Logic includes number systems and Boolean algebra; minimization techniques for Boolean functions; basic combinational logic circuit analysis and design; flip-flops, state machine design and implementation; decoders, multiplexors, registers, counters; simple arithmetic and logic units (ALUs); digital system design of small systems.
CR: the former Computer Science 3723
LH: six 3-hour sessions per semester
OR: twelve 1-hour tutorial sessions per semester
PR: ENGI 1040. Students completing a Minor in Applied Science -
Electrical Engineering may complete Physics 2055 as the prerequisite instead of ENGI 1040.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3891 Foundations of Programming introduces fundamental concepts in object-oriented programming and develops vocational programming skills in C++. Topics include abstraction, types, contracts, object-oriented design, C++ language features including key elements of the standard library and practical programming and debugging skills.
CR: Computer Science 2510
LH: at least four 2-hour sessions per semester
OR: tutorial one hour per week
PR: ENGI 1020
3901 Thermodynamics I is a macroscopic approach to heat, work, and energy; properties of pure substances; conservation of mass, energy for open and closed systems; thermal efficiency and coefficient of performance; second law of thermodynamics; and its corollaries; entropy; second law analysis of thermodynamic systems; second law efficiency; and an introduction to simple thermodynamic cycles.
LH: at least three 1-hour sessions per semester
OR: tutorial 1 hour per week
PR: Mathematics 1001
3911 Chemistry and Physics of Engineering Materials I is an introduction to the structure and properties of engineering materials, in particular materials, semiconductors, ceramics, glasses and polymers. Topics include a review of atomic bonding, discussion of basic crystalline and amorphous structures, point and line defects, and the role these structural features play in elastic and plastic deformations, yield, fracture, glass transition, thermal conductivity, thermal expansion, specific heat and electrical conductivity.
CR: the former ENGI 2205
LH: at least four 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: Chemistry 1050
3934 Dynamics includes kinematics and kinetics of particles using rectangular, normal/tangential and polar coordinates; relative motion using rotating axes; two-dimensional kinematics and kinetics of rigid bodies; forceacceleration, work-energy and impulse-momentum methods.
CR: the former ENGI 2313
OR: tutorial 1 hour per week
PR: ENGI 1010, Mathematics 1001
3941 Production Technology includes an overview of production: production strategies; dimensioning and tolerancing; basic material removal process; forming and shaping process; casting; molding, extrusion and joining processes; computer aided machining; new technologies; design for manufacture.
LH: at least eight 3-hour sessions per semester

### 11.4 Academic Term 4 Courses

4007 Marine Materials examines the properties and uses of steel, aluminum and composite materials in marine applications. Topics include: review of mechanics of materials, Hooke's Law, material fallure models; carbon steel - fundamentals, processes, preparation, design, drawings, certification; joining of aluminum; riveting and welding; corrosion phenomena; composites - classification, production, and mechanical properties.
CR: the former ENGI 7007
LH: at least 4 three-hour sessions per semester
PR: CHEM 1050
4011 Resistance and Propulsion examines the phenomena resisting the motions of ships and some factors considered in the design of the marine screw propeller. The topics include the resistance due to friction, wave making, form appendage, wind and waves, squat, blockage, and shallow water effects, and also include the estimation of powering using methodical series and statistical methods. Topics considered in the design of the marine screw propeller include propeller theory, blade sections, blade strength, methodical series charts, efficiency elements, lifting line calculations, cavitation, and propellers in non-uniform flow.
CR: the former ENGI 5011
LH: 3
OR: tutorial 1 hour per week
PR: ENGI 3054
4020 Marine Fluid Dynamics includes fluid statics; fluid flow phenomena, in general and in marine applications; control volume analysis of fluid motion; conservation of mass, momentum and energy; differential approach to flow analysis, head losses; applications of conservation laws; external vs. internal flow; dimensional analysis and scaling; fluid-structure interaction concepts; potential flow theory, lift and Kutta-Joukowski theorem; viscous flow, boundary layers and drag.
LH: at least four 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 3054
4102 Engineering Economics is an introduction to the concepts in the determination of the economic feasibility of engineering projects; time value of money - interest rates, depreciation, annual, present and future worth
analysis; benefit-cost analysis, tangible and intangible benefits and costs; economic risk and sensitivity analysis, economic optimization.
4312 Mechanics of Solids I examines force analysis of structures and structural components, free body diagrams of structure, components and section of a components, definition of a stress at point, stress notation, complementary property of shear stress, definition of strain, normal strain, shear strain, thermal strain, mechanical properties of materials, analysis of prismatic members due to axial, bending and torsion loading, analysis of beams, shear force and bending moment diagrams, combined loads; and the transformation of stresses and strains.
CR: ENGI 4934
LH: four 1-hour sessions per semester
LH: up to ten 1 -hour tutorials per semester
PR: ENGI 1010
4421 Probability and Statistics includes probability, probability distributions, probability densities, sampling distribution, hypothesis testing, regression and correlation.
CR: the former ENGI 3423, STAT 2550, the former STAT 2510
OR: tutorial 1 hour per week
PR: Mathematics 1001
4424 Discrete Mathematics for Computer Engineering is an introduction to discrete mathematics including a selection of topics such as propositional logic, introductory predicate logic, mathematical reasoning, induction, sets, relations, functions, integers, graphs, trees, and models of computation.
CR: the former ENGI 3422, Mathematics 2320, Computer Science 1002, or the former Computer Science 2740
OR: tutorial 1 hour per week
PR: Mathematics 2050
4425 Mathematics for Civil Engineering II examines the analytical solutions of ordinary differential equations of the first and higher orders and numerical methods: errors, round off and stability, solution to nonlinear equations, curve fitting and interpolation methods, numerical differentiation and integration.
CH: 4
CR: the former ENGI 4422
LC: 4
OR: tutorial 1 hour per week
PR: ENGI 3425
4430 Advanced Calculus for Engineering includes parametric vector functions; polar curves; gradient, divergence and curl; multiple integration; vector calculus, theorems of Green, Stokes and Gauss; an introduction to partial differential equations; and application of advanced calculus to relevant engineering problems.
CR: the former ENGI 5432
OR: tutorial 1 hour per week
PR: ENGI 3424
4602 Process Engineering Thermodynamics extends the study started in ENGI 3901 of thermodynamics, with special reference to chemical process applications: basic laws, thermodynamic properties of pure fluids and mixtures, heat engines, multicomponent systems, thermal/mechanical equilibrium, chemical equilibrium, and thermodynamics of chemical processes. Special emphasis is placed on the application of thermodynamics to practical problems in chemical engineering such as phase equilibria, solutions and reaction equilibria in separations and reaction engineering.
CR: the former Chemistry 2300, the former Chemistry 3300
PR: ENGI 3901
4621 Process Mathematical Methods introduces numerical methods in chemical engineering processes, solution of sets of linear algebraic equations, solution of non-linear equations, curve titting and interpolation, numerical integration, numerical differentiation, first order and higher order ordinary differential equations, boundary value problems and partial differential equations. It provides applications of the methods to different aspects of process engineering such as reactor design, separation, process modeling, equipment design and analysis.
CO: ENGI 4625
LH: eight 2.5 -hour sessions per semester
PR: ENGI 3424 (or Mathematics 2000, Mathematics 2050, and Mathematics 2260)

4625 Process Engineering Calculations is an introduction to the analysis of chemical processes with an emphasis on mass and energy balances. Stoichiometric relationships, ideal and real gas behaviour are also covered. The course will help Process Engineering majors in their second year to develop a framework for the analysis of flow sheet problems and will present systematic approaches for manual and computer-aided solution of full scale balance problems.
CO: ENGI 4602. There is no co-requisite for students completing a minor in Applied Science - Process Engineering.
PR: ENGI 3901. Students completing a minor in Applied Science - Process Engineering must complete Chemistry 2301 as the prerequisite instead of ENGI 3901.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4661 Process Fluid Dynamics I provides process engineering students with fundamentals of fluid mechanics/dynamics. Topics covered include fluid properties; Newtonian and non-Newtonian fluids; pressure; hydrostatics; control volume and system representation; mass and momentum conservation laws; Euler and Bernoulli equations; viscous fluid flows; laminar and turbulent flow; flow through conduits and pipes; pipe networks; flow measurement devices; momentum devices; concept of boundary layers; dimensional analysis; lift and drag on objects; fluid transportation (pumps and compressors).
CR: ENGI 4961, the former ENGI 4913, the former ENGI 5961
LH: five 1-hour sessions per semester
4717 Applied Environmental Science and Engineering examines the nature and scope of environmental problems; concept of sustainable development; basic concepts of environmental quality parameters and standards; water and wastewater treatment; solid and hazardous wastes; atmospheric, water and noise, pollution, their measurements, and mitigation control.
LH: six 3-hour sessions per semester
OR: two 3-hour tutorials per semester
PR: Chemistry 1050, ENGI 3610
4723 Geotechnical Engineering I includes an introduction to soil as a three-phase material and examines physical and mechanical properties; particle size distribution; soil plasticity and structure; classification of soils; soil compaction; hydraulic properties; permeability; flow of water in soil; flownets; effective stress concept in soils; stresses in soils beneath loaded areas; and one-dimensional consolidation theory.
LH: 3
OR: twelve 1-hour tutorials per semester
PR: ENGI 3610
4823 Introduction to Systems and Signals begins with an introduction to systems and signals, and includes mechanical and electrical analogues; principles of linear superposition and time-invariance; definitions, properties, and use of the delta function; applications of complex variables and functions; impulse and step responses; input-output relations of continuoustime systems in terms of convolution and transfer functions; frequency response plots; the Fourier transform and applications; Laplace transforms with application to filtering, communications, and controls.
OR: tutorial 1 hour per week
PR: ENGI 3424, ENGI 3821. Students completing a Minor in Applied Science - Electrical Engineering may complete Physics 3820 as a pre-requisite instead of ENGI 3424 and may complete Physics 3550 as a pre-requisite instead of ENGI 3821.

4841 Electromechanical Devices includes an introduction to fundamental principles of energy conversion; review of single-phase AC circuits; threephase AC circuits; magnetic fields and circuits; transformer models, performance and applications; basic concepts of rotating machines; performance and control of DC motors.
CR: the former ENGI 5842
LH: six 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 3424, ENGI 3821. Students completing a Minor in Applied Science - Electrical Engineering may complete Physios 3820 as a pre-requisite instead of ENGI 3424 and may complete Physics 3550 as a pre-requisite instead of ENGI 3821.
4854 Electronic Circuits 1 provides an introduction to semiconductor electronic devices and circuits. Topics covered include internal structure of electronic devices; working principles, dc and small-signal models and analysis of p-n junction diodes, bipolar junction transistors and field effect transistors; introduction to digital electronics; differential and multistage amplifier circuits; Miller's theorem; frequency response of discrete amplifiers; practical applications including power supplies, amplifiers and switching circuits. CAD tools are used to illustrate the analysis and design of electronic circuits.
LH: eight 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 3821, Physics 3000. Students completing a Minor in Applied Science-Electrical Engineering may complete Physics 3550 as the pre-requisite instead of ENGI 3821.

4862 Microprocessors includes microprocessor architecture; assembly language programming: addressing modes, table look up; memory mapped devices; interfacing techniques: parallel, serial; timing control; analog input and output, and computer displays.
LH: eight 3-hour sessions per semester
OR: nine 1-hour futorial sessions per semester
PR: ENGI 3864
4892 Data Structures examines fundamental data structures; recursive structures and generic programming techniques; modularity and reusability; time complexity and efficient data structures; procedural abstraction; data abstraction and precise documentation of data structures.
CO: ENGI 4424
OR: tutorial 1 hour per week
PR: ENGI 3891

4901 Thermodynamics II examines thermodynamic cycles: power and refrigeration applications; human comfort and air conditioning: mixture of gases and vapours, humidity, psychrometrics; chemically reacting mixtures and combustion; exergy analysis.
LH: at least three 1.5 -hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 3901
4932 Mechanisms and Machines includes an overview of mechanisms within machines; analytical and computer-aided methods for position, velocity, and acceleration analysis of moving mechanisms; power transmission; kinematics and kinetics of planar mechanisms; static and dynamic loads on mechanisms and an introduction to mechanism synthesis. Students will complete an analysis project.
CR: the former ENGI 3933
OR: tutorial 1 hour per week
PR: ENGI 3934
4934 Mechanics of Solids I examines stress and strain analysis applied to bars and beams in axial, torsion and bending; beam deflection, plane stress and strain, stress and strain transformations in two dimensions and Mohr's circle.
CR: ENGI 4312
LH: at least four 1-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 1010
4961 Fluid Mechanics I (same as the former ENGI 5961) examines fluid statics; fluid flow phenomena; control volume analysis; conservation of mass, momentum, and energy; Bernoulli equation; head losses, applications of conservation laws: flow measurement devices; pipe networks; momentum devices, dimensional analysis, boundary layer phenomena, lift and drag.
CR: ENGI 4661, the former ENGI 4913, the former ENGI 5961
LH: five 1-hour sessions per semester
OR: tutorial 1 hour per week

### 11.5 Academic Term 5 Courses

5020 Marine Propulsion is a second course in marine propellers and ship powering. Design and analysis of marine screw propellers and other propulsion devices are covered. Conventional and unconventional propulsion systems are introduced. Methods and philosophy of propeller design are included. Design of fixed-pitch propellers based on lifting line theory and the design of ducted propellers are emphasized. Design of other propulsion systems such as waterjets and sails is also incorporated.
CR: the former ENGI 6020
LH. at least two 3-hour sessions per semester
PR: ENGI 4020
5022 Probability and Random Processes in Ocean Engineering includes basic concepts in probability, random variables, multiple random variables, descriptive statistics. The random processes component reviews mathematics of functions; introduces system input-output relations of continuous-time systems; contrasts time vs frequency domain representations; introduces frequency response plots and the Fourier transform. A probabilistic approach to ship damage, representation of ocean waves (in time and frequency domains), Response Amplitude Operators (RAO), and acceptable levels of risk for design are introduced and applied.
OR: tutorial one hour per week
PR: ENGI 4020, Mathematics 2260 or the former Mathematics 3260
5034 Marine Vibrations provides an introduction to mechanical vibration with a focus on vibration of marine machinery and on the dynamic response of marine structures. Topics include: single degree of freedom systems free vibration, energy methods, response to harmonic excitation, response to arbitrary inputs; multi degree of freedom systems - natural frequencies and mode shapes, response to harmonic excitation; frequency response functions; on-board sources of vibration, vibration measurement techniques and instrumentation.
CR: ENGI 6933, the former ENGI 5932
LH: at least four 2-hour sessions per semester
PR: ENGI 3934
5312 Mechanics of Solids II includes a review of earlier concepts; strain transformation; failure theories; deflections of beams; energy methods; buckling of columns and the inelastic behaviour of beam cross-sections.
LH: four 3-hour sessions per semester
OR: twelve 1 hour tutorials per semester
PR: ENGI 4312
5420 Probability and Random Processes includes basic concepts in probability, random variables, multiple random variables, descriptive statistics, random processes and selected applications for engineering.
PR: ENGI 4823
5434 Applied Mathematical Analysis examines numerical and analytical solutions of applied mathematical problems in Civil Engineering, problems with higher order ordinary differential equations, stiff equations, systems of ODE, Runge-Kutta methods, boundary value problems, applications of eigen
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).
value problems (numerical solutions), Fourier analysis, elliptic, parabolic and hyperbolic partial differential equations and their numerical solutions with engineering applications.

## PR: ENGI 4425

5601 Mass Transfer covers diffusive as well as convective mass transfer, mass transfer correlations, and the application to absorption and membrane separations.
LH: at least seven 2-hour sessions per semester
PR: ENGI 4602 (or Chemistry 2301)
5602 Process Heat Transfer is a study of concepts involved in heat transfer. Topics include applications of continuity and energy equations, fundamentals of heat transfer, modes of heat transfer, conduction, convection and radiation heat transfer, boiling and condensation, evaporation, and heat exchanger analysis and design.
CR: ENGI 6901
LH: one 3-hour session per semester
PR: ENGI 4602, ENGI 4661 or ENGI 4961 or the former ENGI 5961
5671 Process Equipment Design I introduces the principles of unit operations, grouped into four sections: fluid mechanics, heat transfer, mass transfer and equilibrium stages, and operations involving particulate solids. It also includes design and operation fundamentals of unit operations: size reduction, filtration, evaporation, drying, crystallization, and humidification, and membrane separation.
CO: ENGI 5601
LH: at least six 3-hour sessions per semester
PR: ENGI 4621, ENGI 4625
5706 Design of Concrete Structures begins with a review of mechanical properties of concrete. Topics include design methods and requirements, strength of reinforced concrete sections in bending, balanced condition at ultimate strength with tension reinforcement, bending with both tension and compression reinforcement; serviceability, deflections, flexural crack control for beams and one-way slabs; shear strength, inclined cracking, and shear reinforcement; bond stress and development of reinforcement; members in compression and bending; short columns.
LH: five 3-hour sessions per semester
OR: twelve 1-hour tutorials per semester
PR: ENGI 4312
5713 Fluid Mechanics examines fluid properties; fluid statics; buoyancy and stability; kinematics; pressure measurement; continuity, energy and momentum principles; control volume analysis; energy and hydraulic grade lines; free jets; laminar and turbulent flow; dimensional analysis; drag on immersed bodies; flow measurement; head loss in pipes; and an introduction to flow in pipe systems.
CR: ENGI 4961, the former ENGI 4913, the former ENGI 5961
LH: five 2-hour sessions per semester
OR: twelve 1-hour tutorials per semester

## PR: ENGI 4425

5723 Geotechnical Engineering II examines shear strength of soil; types of laboratory and in-situ soil shear strength tests; lateral earth pressure on retaining structures; slope stability analysis; soil bearing capacity for shallow foundations; introduction to pile foundations and limit state design in geotechnical engineering
CR: the former ENGI 6723
LH: 3
OR: twelve 1-hour tutorials per semester
PR: ENGI 4723
5800 Electrical Engineering Design students work, normally in pairs, on small design projects that require them to follow a hierarchical design process including general product definition specifications and requirements, functional-block diagrams, specification of functional blocks for circuit-level synthesis and implementation, system integration, simulation or modelling, testing and verification. The small projects are designed to encourage and motivate students to learn and practise the process of design. The course culminates in a large design project.
CO: ENGI 5821, ENGI 5854
LC: 18 lecture hours per semeste
LH: ten 3-hour sessions per semester
OR: meetings with project supervisor as required
PR: ENGI 4841, ENGI 4854, ENGI 4862
5812 Basic Electromagnetics includes a review of relevant vector calculus, including the divergence, gradient and curl operators in Cartesian, cylindrical and spherical coordinates, divergence theorem, Stokes' theorem, and Laplace's and Poisson's equations. Topics in electrostatics include Coulomb's law, potential and energy, conductors, dielectrics, capacitance and electric field boundary conditions. Topics for magnetism include the steady magnetic field, the Biot-Savart law and Ampère's law.
CR: Physics 3500
OR: tutorial 1 hour per week
PR: ENGI 3821, ENGI 4430
5821 Control Systems I includes an introduction to control systems with negative feedback; mathematical modelling and transfer functions of
electromechanical systems; block diagram and signal flow graphs; controller realization; transient response analysis; Routh's stability criterion; basic control actions and response of control systems; root locus analysis and design; frequency response analysis; Bode diagram; gain and phase margins; compensator design in frequency domain; Nyquist stability criterion; digital implementations of analog compensators; and an introduction to PID controller tuning methods.
LH: four 3-hour sessions per semester
PR: ENGI 4823
5854 Electronic Circuits II provides an introduction to circuits using operational amplifiers. Topics covered include operational amplifier configurations, analysis, and design; transient and frequency response of amplifier circuits; feedback amplifier analysis and design, stability and compensation techniques; noise and distortion in electronic circuits; analysis and design of data converters; and an introduction to analog filter design. CAD tools are used to illustrate the analysis and design of electronic circuits.
LH: eight 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 4823, ENGI 4854
5865 Digital Systems includes concepts, language, tools, and issues pertaining to specification, modelling, analysis, simulation, testing and synthesis of digital systems, including PLD, FPGA, and ASIC devices. Industry standard CAD tools will be used in this course to facilitate system design and testing.
LH: ten 3-hour sessions per semester
PR: ENGI 3891, ENGI 4862
5892 Algorithms: Correctness and Complexity (same as the former ENGI 6892) presents fundamental theories and practices for the design of correct and efficient computing systems, including specification of computing systems and their components, correctness with respect to specifications; methods of verification; algorithmic problem solving strategies (such as divide and conquer, dynamic programming); tractability and intractability of computational problems.
CR: the former ENGI 6892
OR: tutorial one hour per week
PR: ENGI 4424, ENGI 4892
5895 Software Design examines the development process: requirement analysis, design, iterative development, design documentation; an introduction to the Unified Modelling Language: use cases, class diagrams and sequence diagrams; an introduction to software design patterns: creational patterns, structural patterns and behavioural patterns; object oriented, modular decomposition. The course includes a major design project.

LC: 25 lecture hôurs per semester
LH: six 3-hour sessions per semester
OR: meetings with project supervisor as required
PR: ENGI 4892
5911 Chemistry and Physics of Engineering Materials II examines aspects of chemical and physical processes and microscopic structure relevant to the production and use of engineering materials, focussing on metals, alloys, silicates, Portland cement, plastics and adhesives, composites, and wood. Topics include solid-state solutions and compounds, alloy structures, phase diagrams, reaction rates, solid-state transformations, polymerization, oxidation and corrosion, hardness, creep, fatigue, fracture toughness and visco-elastic deformation.
CR: the former ENGI 3205
LH: at least four 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 3911
5931 Mechanics of Solids II examines stresses due to combined loads, asymmetric bending, transformation of stresses and strains, principal stresses and strains (in two and three dimensions), static failure theories, stress concentration, energy methods, method of superposition, buckling of columns, thin- and thick-walled pressure vessels and contact stresses.
CR: ENGI 5312
LH: at least four 1-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 4934
5952 Mechatronics I involves modelling of electro-mechanical systems and introduction to basic analog and digital electronic devices. Topics covered include lumped-parameter modelling of electro-mechanical systems, basic electronic components and semiconductors, introduction to op amps, digital logic and number systems, microcontroller technology and interfacing (switches, LEDs, steppers, solenoids, A/D and D/A conversion).
CR: the former ENGI 4951
LH: five 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 1040, ENGI 3424
5962 Fluid Mechanics II examines differential analysis of fluid motion; conservation of mass: continuity equation; conservation of momentum: Navier-Stokes equations; conservation of energy; basic film lubrication
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
theory, boundary layer flows; compressible flows.
CR: ENGI 6661, the former ENGI 5913, the former ENGI 6961
LH: at least three 1-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 4961 or the former ENGI 5961

### 11.6 Academic Term 6 Courses

6002 Ship Structures I examines longitudinal strength, still water and wave bending moment, shear and bending moment curves, Smith Correction, section modulus calculation, torsion and racking forces; bulkhead and girder scantlings, portal frame analysis by moment distribution and energy method; finite element analysis and the use of Classification Society rules for design of midship section. Laboratory sessions cover use of analysis software to illustrate structural behaviour concepts.
CR: the former ENGI 5003
LH: at least five 3-hour sessions per semester
PR: ENGI 4312
6005 Floating Ocean Structures Design introduces floating structures used in the offshore petroleum industry, along with functional requirements, such as drilling and production, of the platforms. Field development criteria are discussed in the context of platform concept selection and synthesis. Environmental loads are examined, focussing on wave loads and ice loads. Diffraction theory and its application on offshore structures is presented. Offshore safety is discussed in terms of major hazards, risk management, and case studies.
CR: the former ENGI 7005
LH: 1
PR: ENGI 3054
6036 Dynamics of Ocean Vehicles examines applications of the linearized equations of motion to ocean vehicle problems with single and multiple degrees of freedom in waves; dynamics of marine vehicles: motions in waves; hydrodynamics effects such as added mass, radiation and viscous damping; strip theory; irregular seaway and motions.
CR: the former ENGI 6030, the former ENGI 7035
LH: at least two 3-hour sessions per semester
OR: 1 tutorial hour per week
PR: ENGI 3054, ENGI 4020
6046 Marine Engineering Systems (same as the former ENGI 7045) examines shafting system design; shafting system vibration analysis, study of exciting forces and moments, and balancing of reciprocating and rotating machinery; heat transfer and marine heat exchangers; incompressible fluid flow and piping system design and selection of appropriate pumping devices.

CH: 4
CO: ENGI 6933
CR: the former ENGI 7045
LC: 4
LH: 1
PR: ENGI 3901
6055 Marine Cybernetics examines propulsion and motion control of ships, submersibles and offshore structures. Building upon the student's knowledge of mathematics, mechanics and hydrodynamics provides an introduction to control systems and mathematical modeling of marine systems. Course components include: basic control actions and response of control systems; simulation and design of control systems; dynamic positioning; power management; marine automation.

LH : at least four 2-hour sessions per semester
PR: ENGI 4011
6101 Assessment of Technology deals with the issues of the impact of technology on society from an economic, environmental and sociological point of view. Public safety as an engineering responsibility will also be covered. Students will be expected to participate in group discussions, write a number of essays and give oral presentations.
6322 Thermal Sciences examines fundamental concepts associated with thermodynamics, fluid dynamics and heat transfer; first and second laws of thermodynamics; system and control volume analysis; classification of flows; introduction to boundary layers and drag; convection, conduction and radiation heat transfer; thermal insulation and calculation of R-values; and cooling of electrical components.
CR: the former ENGI 4322
PR: ENGI 5312
6602 Offshore Petroleum Geology and Technology introduces basic concepts in geology and geophysics of the offshore environment. An outline of petroleum geology is presented, following a path from the origins of hydrocarbons through migration in the Earth's crust, accumulation in reservoirs and the strategies used to discover and to exploit liquids found in the subsurface. Topics include an introduction to the offshore oil and gas industry in harsh environment, type of platforms and structures, exploration phase of offshore oil development, production drilling and completion processes and equipment, and oil and gas transportation system. There are
case studies and a project.
PR: completion of Academic Term 5
6621 Process Modelling and Analysis (same as the former ENGI 5621) is designed to introduce the concepts of process model building and its application in design and process operations. It includes fundamentals of process modelling, lumped parameter dynamic models, distributed parameter dynamic models, advanced dynamic model development, application of process models, and computer aided process design. The course also introduces model linearization, degrees of freedom analysis, stability, stiffness, observability, and controllability.
CR: the former ENGI 5621
LH: five 3-hour sessions per semester
PR: ENGI 4621, ENGI 4625
6631 Chemical Reaction Engineering will cover the fundamentals of chemical kinetics and reaction rate expressions as well as the types of reactors, homogeneous and heterogeneous (catalytic) reactors, and the interrelation between transport phenomena and reaction engineering as it applies to process design. It also includes an overview of non-ideal reactors and an introduction to bio reactors.
LH: four 2-hour sessions per semester
PR: ENGI 4621, ENGI 4661 or ENGI 4961 or the former ENGI 5961
6651 Sustainable Engineering in Processing Industries will introduce students to sustainable development and its application to processing operations. Areas such as traditional economic growth, materials cycles, methods for measuring environmental impact, life cycle analysis, waste treatment technologies and recycling technologies will be covered. In addition, the concept of industrial ecology will be included.
PR: ENGI 4625, ENGI 5601
6661 Process Fluid Dynamics II builds upon the materials introduced in Process Fluid Dynamics I. The course covers important aspects of fluid dynamics principles and applications in process engineering, including; continuity equation; differential governing equations of fluid momentum; conservation laws in chemical/process engineering; ideal and non-ideal flow; compressible and incompressible flow; boundary layer theory for laminar and turbulent flow; multiphase flow; introduction to CFD; turbomachinery; fluid flow features of unit operations
CR: ENGI 5962, the former ENGI 5913, the former ENGI 6961
LH: three 1 -hour sessions per semester
PR: ENGI 4661, ENGI 4961 or the former ENGI 5961
6671 Process Equipment Design II will cover design and operation of equilibrium stage separation processes including distillation, extraction, and leaching. It will also cover advanced concept of equipment design such as heterogeneous system, multiphase system, absorption, and adsorption operation and computer assisted design. Course will use HYSIS and other process equipment design tools.
LH: at least four 2-hour sessions per semester
PR: ENGI 5601, ENGI 5671
6705 Structural Analysis I examines structure classification and loads, building code provisions, the analysis of statically determinate frames, arches and cables, stability and determinacy of planar structures, shear and moment diagrams for frames, influence lines for statically determinate structures, the force method of analysing indeterminate structures, the slope deflection method, and moment distribution method.
LH: six 3-hour sessions per semester
OR: twelve 1-hour tutorials per semester
PR: ENGI 5312
6707 Design of Concrete and Masonry Structures examines the design of slender columns, design methods for reinforced concrete two-way slabs, two-way slabs supported on walls and stiff beams, direct design method, design of foundation systems, footing design, design of concrete retaining walls, engineered masonry, mortar stress, analysis and design of flexural members, axial load and bending in unreinforced and reinforced walls.
LH: 2
OR: twelve 1-hour tutorials per semester
PR: ENGI 5706
6713 Hydraulics examines flow in pipe systems and networks; uniform and non-uniform flow in open channels; hydraulic machinery and associated conduits; design and analysis of culverts; and pipeline/pump system optimization.
LH: four 3-hour sessions per semester
PR: ENGI 4102, ENGI 5713
6749 Construction Planning Equipment and Methods includes construction equipment selection and utilization; earthmoving including use of explosives; case studies of major civil projects; principles of project planning and control; computer applications to the construction industry.
CR: the former ENGI 8749
PR: ENGI 4102, completion of Academic Term 5 of the Civil Engineering program
6813 Electromagnetic Fields is a continuation of the topics started in Engineering 5812, including a review of electrostatics and magnetostatics,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

Maxwell's equations, Lorentz force, Poynting's theorem, plane waves, and applications including two-wire transmission lines.
CR: Physics 4500
OR: tutorial 1 hour per week
PR: ENGI 5812. Students completing a Minor in Applied Science Electrical Engineering may complete Physics 3500 as the prerequisite instead of ENGI 5812.

6843 Rotating Machines examines the fundamentals of rotating machines; design of machine windings; polyphase and single phase induction motor theory and applications; synchronous machine theory; stability and control of synchronous generators; introduction to permanent magnet machines; introduction to AC motor drives.
LH: six 3-hour sessions per semester
OR: eight 1-hour tutorial sessions per semester
PR: ENGI 4841
6855 Industrial Controls and Instrumentation examines control and instrumentation system components; transducers and signal processing circuits, linear variable differential transformers, power oscillators; electromechanical actuators, solenoids, power drives; $A / D$ and $D / A$ conversion, standard PC interfaces; real-time operating systems; design of discrete-time feedback controliers on a PC platform; system integration, control system tweaking and troubleshooting; programming soft-PLC's using IEC61131.
CR: the former ENGI 7858
LH: at least eight 3-hour sessions per semester
PR: ENGI 5821
6856 Power Electronics is an overview of power semiconductor switches, an introduction to energy conversion and control techniques and examination of controlled rectifiers; phase-controlled converters; switchmode dc/dc converters; variable frequency dc/ac inverters; ac/ac converters; gate and base drive circuits; design of driver and snubber circuits; thermal models and heat sink design.
CR: the former ENGI 7846
LH: eight 3-hour sessions per semester
OR: eight 1 -hour tutorial sessions per semester
PR: ENGI 5854
6861 Computer Architecture begins with a review of microprocessors and computer organization. Topics include fundamentals of computer design: performance metrics and cost; instruction set architecture, memory hierarchy design: cache, main memory and virtual memory; pipelining: hazards, parallelism; special purpose processors; multiprocessors and thread-level parallelism.
OR: tutorial 1 hour per week
PR: ENGI 5865
6871 Communication Principles begins with a review of signal representation and analysis and includes distortionless signal transmission, analog modulation (AM, FM and PM), super-heterodyne receiver, sampling theorem, pulse amplitude modulation (PAM), pulse code modulation (PCM), delta modulation.
LH: four 3-hour sessions per term
PR: ENGI 4823, ENGI 5420
6876 Communication Networks is an introduction to communication networks such as the telephone and computer networks. Topics include circuit and packet switching, network protocols and layered architecture, physical layer, data link layer, network layer, error control; local area networks, and internetworking.
PR: ENGI 5420
6893 Software Development Practice introduces the student to software development processes, practices, and tools. It includes software project management using agile processes; development tools and practices; architectural level design; deployment and operations; and verification via static analysis, formal verification, and testing.
LH: six 3-hour sessions per semester
PR: ENGI 5892, ENGI 5895
6901 Heat Transfer I examines modes of heat transfer; conduction: steady 1-D conduction, thermal resistance, extended surfaces (fins), lumped capacitance analysis, 1-D transient conduction; convection: Newton's law of cooling, convection heat transfer coefficient, external boundary layer flows, internal flows; radiation: principles, properties, exchange factors, black body radiation, and enclosures, radiation shields.
CR: ENGI 5602
LH: at least one 3-hour session per semester
OR: tutorial thour per week
PR: ENGI 4901
6928 Computer Aided Engineering Applications (same as the former ENGI 7928) introduces a variety of Computer Aided Engineering (CAE) applications based on advanced 3D CAD modelling. The fundamentals of 3D modelling are covered. CAE include assembly modelling, mechanism animation and finite element analysis. Applications include Computer Aided Manufacturing (CAM); model based inspection (i.e. Coordinate Measurement Machines); reverse engineering; document/drawing
production; data exchange; and data management. Lab exercises provides exposure to solid modelling and CAE applications using CAD/CAM/CAE tools.

CR: the former ENGI 7928 or 7962
OR: at least ten 3-hour computer laboratory sessions per semester
PR: ENGI 1030
6929 Mechanical Component Design I (same as the former ENGI 5927) examines adequacy assessment and synthesis of machine elements with a focus on failure prevention, safety factors, and strength; static failure and fatigue analysis of components. Topics include the design of power screws, bolted connections, welds, and shafts.
CR: the former ENGI 5926 or 5927
OR: at least eight 3-hour computer laboratory sessions per semester PR: ENGI 4312

6933 Mechanical Vibrations examines single degree of freedom systems: free vibration, energy methods, response to harmonic excitation, response to arbitrary inputs, rotating unbalance, vibration isolation; two degree of freedom systems: natural frequencies and mode shapes, vibration absorption.
CR: the former ENGI 5932
LH: at least four 2-hour sessions per semester
PR: ENGI 3934
6951 Control Systems 1 examines modeling, analysis and design o feedback control systems using classical controller design methods. Topics covered include linear system modelling using Laplace transforms, control system stability, time domain analysis - root locus design, frequency domain analysis - bode diagram and Nyquist design, PID Control.
CR: the former ENGI 6925
LH: at least three 1 -hour sessions per semester
OR: 1-hour tutorial per week
PR: ENGI 5952 or the former ENGI 5951

### 11.7 Academic Term 7 Courses

7000 Ocean Systems Design develops concept design methods for marine systems from need definition through to solution selection, including weight, cost and power requirements estimating, selection of principal design characteristics and evaluation of alternative solutions. Students develop a proposal for a marine system design project which will include a statement of requirements, a parametric study, a work plan and schedule. This design project will be completed as a full design in ENGI 8000.
CR: the former ENGI 7052
LH: 3
PR: ENGI 3001, ENGI 3054, ENGI 4102
7002 Ship Structures II is an introduction to ship structural safety and rational design. Topics include local strength analysis, elastic, plastic and ultimate strength of plating, frames and grillages, buckling of columns and plates and fatigue and fracture in ships. Laboratory exercises include structural analysis software and physical experiments.
CR: the former ENGI 6003
LH: at least five 3-hour sessions per semester
PR: ENGI 6002
7003 Small Craft Design (same as the former ENGI 8003) presents fundamentals of naval architecture and design methodology for small craft. Emphasis is on recreational craft, with special emphasis on sailing vessels. Construction materials, scantlings, performance prediction and seaworthiness are covered. Design problems unique to small craft such as mast design, sail area determination and performance prediction are covered. Students will do a small craft design of their choice. Small weekly design studies will be required.
CO: the former ENGI 7035
CR: the former ENGI 8003
7033 Marine Hydrodynamics examines the fundamental equations of hydrodynamics, boundary layers; potential flow, added mass, damping, circulation, and vorticity; numerical methods for hydrodynamic coefficients; water waves and loading for regular and irregular seas.
LH: at least one 3-hour session per semester
OR: one tutorial hour per week
PR: ENGI 4020
7036 Manoeuvring of Ocean Vehicles examines manoeuvrability of ocean vehicles; derivation of linear and nonlinear equations of motion and hydrodynamic coefficients; stability of motion; standard maneuvers such as turning circle, turning spiral, and PMM test; modelling and simulations of engine, propulsion, rudder and transmission systems during manoeuvring; systems for course keeping, autopilot, motion control and dynamic positioning.
CR: the former ENGI 6030, the former ENGI 7035
LH: at least two 3-hour sessions per semester
OR: 1 tutorial hour per week
PR: ENGI 6036
7046 Marine Economics and Ship Construction examines the macro-
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
economics of the marine transportation industry and identifies and examines the stages of project definition. The basic techniques of project management needed for large scale industrial marine projects, such as ship construction and transportation of natural resources, are introduced. This course examines methods for estimating labour hours, materials, fabrication facilities required and schedule for ship construction. The legal and social aspects of large projects are also examined.
PR: ENGI 4102
7621 Process Dynamics and Control familiarizes students with the scientific and engineering principles of process dynamics and control. Students will apply and integrate knowledge of chemical engineering to identify, formulate and solve process dynamics problems and develop control systems. Modern computational techniques and tools will be used for solving chemical process control problems. Also students will become familiar with industrial control systems.
LH: at least six 2-hour sessions per semester
PR: ENGI 6621 or the former ENGI 5621
7623 Process Simulation provides students with the knowledge and experience to use a process simulator effectively for the analysis and synthesis of process flowsheets, mass and energy balances, sizing of individual component and process unit, reactor modeling, separation device modeling, heat exchanger modeling, and dynamic and steady state analysis. LH: at least nine 2-hour sessions per semester
PR: ENGI 6621 or the former ENGI 5621, ENGI 6671
7640 Process Engineering Project I gives students the opportunity to apply the knowledge gained in previous design and technical courses to complete a high-level design of a process plant or major modification to a process plant. The goal is to expose students to process design, practical design issues, and to provide experience in the complete design process as applied to real devices. Students will work in groups to design a process system. This course is a precursor to ENGI 8640.
LC: scheduled as required
PR: ENGI 4102, completion of academic term 6 of the Process Engineering program

7650 Offshore Oil and Gas Engineering Project I is a multidisciplinary design project that illustrates the application of previous engineering science and design related courses. The project will be done by teams of students with individuals concentrating their participation in their own engineering discipline. The project topic will be from the offshore oil and gas engineering industry. Lectures will be scheduled as required. This is the Term 7 project and if the scope of the project is such that it needs to continue, then the student will have the option to continue the same project in term 8 (in ENGI 8650).

LC: 1
PR: completion of Academic Term 6
7651 Industrial Pollution Control/Pollution Prevention is designed to introduce methods of industrial pollution assessment and control. Topics include waste characterization, water pollution assessment, water pollution control, air pollution assessment and control, solid waste assessment and control, pollution prevention, environmental risk assessment and risk based decision making.
PR: ENGI 6621 or the former ENGI 5621, ENGI 6671
7680 Supervisory Control and Data Acquisition examines data acquisition and intelligent field devices; distributed systems and fieldbus technology; programmable logic controllers and programming standards; operator control interface; supervisory control and data acquisition; and enterprise organization
LH : at least four 3-hour sessions per semester
PR: ENGI 5821
7691 Mining and Metallurgical Process Engineering is designed to provide students with a basic fundamental background to the mining, mineral processing, and extractive metallurgical processing industry from both traditional and modern industrial methodologies. Concepts such as a mine design, mineral flow sheets, extraction methods, and examples from industrial applications will be reviewed with problems.
LH: at least four 2-hour sessions per semester
PR: completion of academic term 6 of the Process Engineering program
7704 Design of Steel Structures begins with a review of design concepts, standards and products. Topics include design of members and connections, tension members, bolted joints, welded joints, compression members, stability and effective length, flexural members including beams \& beam-columns, plate girders, composite beams, introduction to serviceability through deflections of beams.
LH: five 3-hour sessions per semester
OR: twelve 1-hour tutorials per semester
PR: ENGI 5706 and ENGI 5312 or approval of the appropriate Head of the Department

7706 Finite Element Structural Analysis includes a review of basic concepts required for FEA, basics of stiffness formulation, direct stiffness method, displacement method, one dimensional elements, trusses and frames. Topics include 1-D fluid and heat transfer elements, automated
analysis and modelling concepts, higher order elements, two dimensional elements - plane stress and plane strain, introduction to 3D and other types. - introduction to advanced topics and isoparametric formulation.

LH: at least eight 2-hour sessions per semester
PR: ENGI 6705 or approval of the appropriate Head of the Department
7707 Reliability and Environmental Loading on Offshore Structures begins with an introduction to natural phenomena that cause loading and influence the design of marine structures. Topics include the interpretation and utilization of field data for the determination of design loads for wind, waves currents and ice and case studies of load analysis for the design of offshore structures in Atlantic Canada.

## PR: ENGI 5312

7713 Hydrology and Water Resources examines basic hydrometeorological processes, evapotranspiration, precipitation, intensity-duration-frequency (IDF) analysis and development, snowmelt, infiltration, runoff and streamflow; statistical treatment of hydrologic data; hydrograph analysis and synthesis; design storms and design floods; reservoir storage and flood routing; urban run-off and drainage; use of hydrologic modelling software.
LH: four 2-hour sessions per semester
PR: ENGI 5713
7716 Hydrotechnical Engineering examines the theory and application of steady gradually-varied flow in artificial and natural open channels together with an introduction to appropriate software; erosion protection and mobileboundary hydraulics; problems with ice in rivers, the design of spillways, energy dissipaters, and culverts. There is an introduction to water hammer and surge tanks.

LH: four 3-hour sessions per semester
PR: ENGI 6713
7718 Environmental Geotechniques (same as the former ENGI 6718) examines soil characteristics; soil mineralogy; soil water interaction; soil contaminant interactions; advection, adsorption and diffusion; non-aqueous phase liquids; geosynthetics; design of landfills; and use of waste materials. Relevant software programs are used.

CR: the former ENGI 6718
OR: six 1-hour tutorials per semester
PR: ENGI 5723
7723 Geotechnical Engineering III examines soil investigation and site characterization; pile foundations; embankment dams; elements of geotechnical earthquake engineering; constitutive theories for soil materials; and numerical methods in geotechnical engineering. The students select two of the above topics on which they are interested in concentrating their efforts. Bi-weekly lectures are offered on the other topics at an informal level.
PR: ENGI 5723
7745 Highway Engineering examines highways transportation systems including driver, vehicle and road characteristics; geometric design of highways; subgrade and base materials; highway drainage features; design of flexible and rigid pavement; fundamentals of traffic flow and queuing theory; traffic control and analysis of signalized intersections; travel demand and traffic forecasting.
LH: four 3-hour sessions per semester
PR: ENGI 3703, ENGI 5723
7748 Project Planning and Control includes an introduction to types of contracts, project delivery approaches, and prevailing contractual relationships. The course examines basic project management techniques for network planning and scheduling (CPM and PERT); principles of resource productivity databases, preliminary estimating, and detailed bid preparation; quantitative approaches for effective control of time, cost, resource, quality, and value of constructed facilities; use of computer software for scheduling, estimating, and control.
PR: completion of Academic Term 6 of the Civil Engineering program
7803 Electrical Engineering Design Project I provides an opportunity for senior students to integrate the knowledge that they have acquired through the junior terms and apply it to solving an electrical engineering design problem. Students work in small teams with the assistance of a faculty mentor to define an appropriate design problem and propose a method of solution to the problem. The project is continued in ENGI 8853.

CR: the former ENGI 7800
LC: at least 10 lecture hours per semester
OR: weekly meetings with project supervisor
PR: ENGI 4102, completion of Academic Term 6 of the Electrical Engineering program

7804 Computer Engineering Design Project I provides an opportunity for senior students to integrate the knowledge that they have acquired through the junior terms and apply it to solving a computer engineering design problem. Students work in small teams with the assistance of a faculty mentor to define an appropriate design problem and propose a method of solution to the problem. The project is continued in ENGI 8854
CR: the former ENGI 7800
LC: at least 10 lecture hours per semester
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

OR: weekly meetings with project supervisor
PR: ENGI 4102, completion of Academic Term 6 of the Computer Engineering program

7811 Antennas examines the fundamentals of electromagnetic radiation; potentials; small antennas and antenna parameters; thin linear wire antennas and antenna arrays; antenna impedance and ground effects; Friis transmission formula; and aperture antennas.
LH: three 3-hour simulation and demonstration sessions per semester OR: tutorial 1 hour per week
PR: ENGI 6813
7824 Introduction to Digital Signal Processing examines sampling theory; elementary discrete-time signals; discrete-time linear and timeinvariant systems; linear constant-coefficient difference equations; the convolution sum; the discrete-time Fourier series; the discrete-time Fourier transform; the z-transform; the frequency response of discrete-time systems; the discrete Fourier transform; the efficient fast Fourier transform algorithm; an introduction to digital filter design techniques; and digital signal processing applications.
PR: ENGI 6871
7825 Control Systems II examines state space models for multiinput/output systems; observability, controllability; state feedback without and with integral controller structure, state observers; quadratic optimal regulator and tracking control strategies; discrete-time state equations; and an introduction to optimal control.
CR: the former ENGI 6825
PR: ENGI 5821
7844 Power System Analysis begins with an introduction to electric power systems. Topics include per unit quantities; transmission line parameters; modelling of power system components; single line diagrams; network equations formulation; bus impedance and admittance matrices; load flow analysis and control; design of reactive power compensation for power system performance enhancement; tap changing, auto and control transformers for power system application; economic dispatch and optimal power flow studies.
LH: six 3-hour sessions per semester
PR: ENGI 6843
7854 Image Processing and Applications presents fundamental theoretical and practical concepts of image processing and analysis. These concepts include image enhancement and filtering, frequency domain analysis, morphological image operations, image segmentation, and feature extraction. The course enables the use of these concepts to automatically process and analyze images and videos from various real-world applications, such as biomedical imaging, visual surveillance, and robotics.
CR: Computer Science 4756
LH: at least four 3-hour sessions per semester
7855 Communications Electronics - inactive course.
7856 Renewable Energy Systems examines the assessment of wind energy potential, wind turbine aerodynamics, types, modelling and control strategies; hybrid energy systems; energy storage; solar energy systems; photovoltaic, PV system engineering, stand-alone and grid connected systems, sizing and maximum power tracking; solar water pumping; microhydro systems and control; tidal power, wave energy converters, ocean thermal systems. Applications of hybrid energy system sizing software are also included in the course.
LH: eight 3-hour sessions per semester
PR: ENGI 6843
7864 Computer Security introduces students to key computer security concepts for applications, hosts, networks and the Web. Students will learn to employ the primitives provided by programming languages, cryptography, operating systems and network protocols for protecting engineered systems and their users.
CO: ENGI 7894
PR: ENGI 6861, 6876
7894 Concurrent Programming surveys parallel and distributed architectures and examines patterns of concurrent program design; correctness of concurrent programs: safety and liveness properties, proof of properties; synchronization using locks, semaphores, and monitors; communication using message passing and remote procedures; parallelization for high-performance computation and advanced topics such as scientific applications, distributed systems, model checking, and transaction processing.
CR: the former ENGI 8893
PR: ENGI 5892 or the former 6892, ENGI 6861
7901 Heat Transfer II examines advanced topics in heat transfer; multidimensional heat conduction: shape factors, numerical methods, moving heat sources; phase change heat transfer: melting, solidification, condensation, and boiling; natural convection: external flows, internal flows; multimode heat transfer; and environmental radiation.
LH: at least three 3-hour session per semester
PR: ENGI 6901

7903 Mechanical Equipment examines performance characteristics of mechanical equipment; fluid power devices: pipes; valves; turbomachinery: pumps; fans; blowers; compressors; heat transfer devices: heat exchangers; boilers, and cooling towers.
LH: at least five 1.5-hour sessions per semester
PR: ENGI 6901
7911 Industrial Materials includes metals and alloy systems, strengthening mechanisms of metals, iron-carbon alloys, corrosion resistant alloys, light metals and their alloys, copper and nickel base alloys, super alloys, the function of alloying elements in metals, heat treatments, surface hardening, and surface modification.
CR: the former ENGI 6972
LH: at least 20 hours per semester
PR: ENGI 5911
7926 Mechanical Design Project I is the first of two capstone design courses in the Department of Mechanical Engineering. In this course mechanical students are organized into small groups or teams, which must complete a common design challenge. The project is presented as an openended problem statement with specific performance objectives. The system must be designed, prototyped and tested during the course of the term. Each team is a small consulting firm and is required to document its object planning as well as its design.
CR: the former ENGI 7936
LC: minimum of 2 lecture hours per week
LH: 3
PR: ENGI 4102
7929 Mechanical Component Design II same as the former ENGI 6927) is a continuation of the ENGI 6929 course in analysis and synthesis of machinery, including advanced analysis of machine elements such as clutches, brakes, couplings, journal bearings and gears. Advanced machine design concepts are examined, such as reliability, optimization and techniques for stimulating innovative design. A synthesis project involving the machine elements studied is usually included.
CR: the former ENGI 6926 or 6927
OR: at least one 3-hour computer laboratory tutorial per week
PR: ENGI 6929 or the former 5927
7930 Instrumentation and Experimental Design involves analysis and design of mechanical measurement systems and multi factor experiments. Topics covered include static and dynamic characteristics of sensors, Fourier transforms, sampling theorem and signal conditioning, uncertainty analysis of sensors, sensors for motion control, load sensing and process control, one factor vs multi factor experiments, factorial design and analysis, partial factorial design and blocking, response surface methodology (RSM). LH: five 3 -hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 4421
7934 Finite Element Analysis includes a review of basic concepts required for FEA, basics of stiffness formulation, direct stiffness method, displacement method, one dimensional elements, trusses and frames. Topics include 1D fluid and heat transfer elements, automated analysis and modelling concepts, higher order elements, two dimensional elements plane stress and plane strain, introduction to 3D elements, introduction to advanced topics and isoparametric formulation.
LH: 2
OR: tutorial 1 hour per week
PR: ENGI 4430, ENGI 5931
7952 Robotics and Automation provides the fundamentals in robotic manipulators and arms. The course provides basic understanding in coordinate transformations for spatial description, both kinematical and kinetic analysis, forces and dynamics and finally trajectory generations and path planning.
CR: the former ENGI 7944
LH: at least three 3-hour sessions per semester
PR: ENGI 4430
7953 Mechatronics II emphasizes the integration of the core technologies on which contemporary, mechatronic designs are based. Topics covered include combinational logic circuit design, sequential logic circuit design, modelling and control of servo motors, selection, sizing, and modelling of servo valves and hydraulic actuators, microcontroller technology and interfacing (relays, timers, PWM control, interrupts, digital communication).
CR: the former ENGI 5951
LH: five 3-hour sessions per semester
OR: tutorial 1 hour per week
PR: ENGI 5952

### 11.8 Academic Term 8 Courses

8000 Ocean and Naval Architectural Engineering Project completes the design project selected and approved in ENGI 7000. The project must illustrate the application and integration of previous design related courses, i.e., decision methods, impact assessments and application of technology.

[^6]The subject may be ship or offshore structure design, marine system, directed research or a unique design solution. Lectures will be scheduled as required.
LH: 3
PR: ENGI 7000
8034 Applied Acoustics provides an introduction to acoustic engineering. Topics include: sound in fluids and solids, wave phenomena, mathematical models of sound waves, sources of sound, frequency analysis, levels and decibels, introduction to psychoacoustics, sound waves in rooms, reverberation time, sound absorbers, sound insulation, room acoustical design, introduction to underwater acoustics, acoustic measurement techniques and instrumentation.
LH: at least four 3-hour sessions per semester
PR: ENGI 5034
8046 Marine Engineering II builds on the fundamental marine engineering aspects covered in ENGI 6046 to include engineering factors onboard the ship, such as electrical generation, lighting, heating and air conditioning, as well as special systems needed on board the ship for operation, cargo management and navigation.
PR: ENGI 6046
8054 Advanced Marine Vehicles examines the concepts used in the design of advanced marine vehicles. Emphasis will be given to: structural design of craft constructed from fibre reinforced plastics; high speed marine vehicles (powering, structures, seakeeping and model testing); small craft.
LH: at least 9 hours per semester
PR: ENGI 6002 or the former ENGI 5003
8055 Design and Control of Unmanned Marine Vehicles examines the formulation of mission statement and design constraints of unmanned marine vehicles, surface and underwater. Major subsystems, including propulsion, power, communication, navigation and control, are introduced. Principles of navigation and control as they pertain to unmanned systems are examined. This course includes hands on experimentation including the design of a small unmanned platform for tank experiments.
LH: at least 12 hours per semester

## PR: ENGI 3054

8074 Arctic Ocean Engineering (same as the former ENGI 8674) examines marine ice as an environmental load factor in the context of ships and engineered structures designed for ice covered waters. Topics include types of naturally occurring ice; sea ice formation and characteristics; mechanical strength of sea ice under common modes of ice failure; modes of ice interaction with ships and marine structures; estimation of ice forces on offshore structures; powering requirements for ice breaking ships; regulations and standards for design of ships and offshore structures in arctic environments.
CR: the former ENGI 8674
LH: at least four 3-hour sessions per semester
PR: ENGI 3934, ENGI 4312
8075 Finite Element Analysis of Marine Structures examines application of the finite element method (FEM) to the design and assessment of marine hull structures. Simulation of static, quasi-static, and impact loads on hull structures is discussed. Linear and nonlinear analyses are explored. Practical considerations for finite element model design are discussed.
LH: 12 weekly 3-hour lab sessions
PR: ENGI 4007, ENGI 7002
8150 Engineering Entrepreneurship (same as the former ENGI 8607) is an introduction to the concepts, issues, and themes related to business planning, strategy, and entrepreneurship, with an overview of the functional activities in a typical business venture. Business analysis and planning skills are developed. The course explores the business planning and strategic management issues of technology-driven enterprises in the early stages of development and focuses on the engineer as an entrepreneur.
CR: the former ENGI 8607
PR: completion of Academic Term 6
8151 Technology, Sustainable Society and International Development (same as the former ENGI 8977) examines multidisciplinary planning on technical international development projects through the conceptual frameworks of international development and project implementation theory. Emphasis is placed on analysis of the complex relationships between society, culture, economic, environmental and political factors, and technology to achieve sustainable international development objectives.
CR: the former ENGI 8977
PR: ENGI 3101
8152 Engineering Professionalism II (same as the former ENGI 7102) examines the demands upon the 21st Century engineer. Topics include the roles and responsibilities of the professional engineer in society, the Engineering Code of Ethics, sustainable development, environmental stewardship, the place of technology in society and the nature of technological decisions. Students will reflect on their entire course of studies, in the context of current accreditation graduate attributes. This is a writing-intensive course with a critically-reflective component.
CO: one of ENGI 8000, ENGI 8640, ENGI 8650, ENGI 8700, ENGI 8853,

ENGI 8854, or ENGI 8926
CR: the former ENGI 5101, the former ENGI 7102 PR: ENGI 004W

8640 Process Engineering Project II is a design project that illustrates the application of previous engineering science and design related courses. Projects will be done by teams of students with individuals concentrating their participation in their own engineering discipline. The project topic will be from the process industry which includes the offshore oil and gas industry, mining and metal processing industry and chemical process industry.
LC: scheduled as required
PR: ENGI 7640
8650 Offshore Oil and Gas Engineering Project II is a multidisciplinary design project that illustrates the application of previous engineering science and design related courses. The project will be done by teams of students with individuals concentrating their participation in their own engineering discipline. The project topic will be from the offshore oil and gas engineering industry. Lectures will be scheduled as required.
CR: the former ENGI 8600
LC: 1
PR: ENGI 7650
8670 Reliability Engineering is an introduction to reliability engineering; physics of failure and failure mechanism, reliability measures and assessment; reliability of components and parts; complex system reliability and availability analysis; and field reliability assessment. The course includes case studies and a project.
PR: completion of Academic Term 6
8671 Safety and Risk Engineering begins with an overview of safety and risk issues in the offshore oil and gas industry. The course examines regulatory requirements; hazards and structured analysis tools; risk terminology and quantified risk analysis (QRA) techniques; and safety assessment studies. The course includes project and case studies.
PR: completion of Academic Term 6 or registration in the Minor in Applied Science - Process Engineering
8673 Subsea Pipeline Engineering provides an introduction to subsea pipeline engineering with a focus on the mechanical design of offshore pipelines. Stress-based, design-based and limit-states design for strength and stability are examined. Other fundamental pipeline engineering design issues such as materials specification, flow assurance and installation are reviewed. Principles of geotechnical engineering and pipeline/soil interaction analysis techniques are investigated. Special topics are also reviewed.
LH:2
R: one of ENGI 5312, ENGI 5931 or ENGI 7002 or the former ENGI 6003
8676 Design of Natural Gas Handling Equipment covers process description, design methods, operating procedures, and troubleshooting aspects of gas production facilities including inlet separation operations, hydrate prevention and control, gas dehydration, NGL recovery and dew point control, gas transmission and pipeline design and transportation systems.
PR: completion of Academic Term 6
8677 Process Plant Design and Economics will provide a comprehensive picture of the availability and design of both traditional and current process equipment. Economic and optimization issues relevant to investment, product-cost estimation, and profitability analysis will also be addressed. The course will provide students with tools to evaluate the economics of process industries reflecting current economic criteria, and provide helpful guidelines to approaching, defining, and solving optimization problems.

## PR: ENGI 6671

8680 Process Control and Instrumentation begins with an introduction to feedback control systems, and instrumentation. Topics include modelling thermal, gas, liquid and chemical processes; sensors and transmitters, controller design and simulation in Matlab /Simulink, industrial feedback controllers; design of feedback control loops, tuning of feedback controllers; cascade, ratio, digital controller design; feedforward control; multivariable process control; fuzzy logic control and tuning, instrumentation electronics design, and process system identification using Matlab /Simulink.
LH: twelve 3-hour sessions per semester
PR: ENGI 5821
8690 Reservoir Engineering examines fluid pressure regimes, oil recovery factors, calculation of hydrocarbon volumes, reservoir rock characteristics, reservoir fluid properties, porosity and permeability, material balance, and well test analysis.
PR: completion of Academic Term 6
8691 Petroleum Production Engineering examines the procedures and equipment necessary for preparing a well to produce hydrocarbons and maximizing flow rate during the life of the well; techniques for well productivity analysis in under-saturated, saturated, and natural gas reservoirs; well completion configuration tubulars; packers and subsurface flow control devices; completion and work over fluids; perforating oil and gas wells; formation damage; surfactants for well treatment; hydraulic fracturing; acidizing; scale deposition, removal, and prevention; work over and
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
completion rigs; and artificial lift

8692 Drilling Engineering for Petroleum Exploration \& Production covers both offshore and onshore drilling operations and includes: rotary drilling rig operations, well construction sequence, drill string, drill bits, well bore hydraulics, casing and well heads, cementing, well control, directional and horizontal drilling, well planning and fishing operations, and extended reach, horizontal and multilateral well drilling techniques.
PR: completion of Academic Term 6
8693 Petroleum Facilities Engineering - inactive course.
8694 Downstream Processing includes: oil and natural gas processing, oil and gas storage facilities and their design, oil and gas separation processes, petroleum refining processes, and de-bottle necking.
PR: completion of Academic Term 6
8696 Petroleum Refining Engineering will cover crude and refinery products properties and specifications, process description, design methods, operating procedures, and troubleshooting aspects of modern petroleum refining. It also includes hydrorefining, catalytic reforming, hydrocracking, isomerisation, refinery machinery, and utilities.
PR: completion of academic term 6 of the Process Engineering program
8700 Civil Engineering Project is a practically oriented design project integrated over the five areas in which Civil programs are offered. Students will operate in consultant groups and will complete a design for a typical Civil Engineering undertaking.
LC: scheduled as required
OR: 1 client meeting per week, 1 tutorial per week
PR: completion of Term 7 of the Civil Engineering program
8705 Structural Building Systems examines geometries, loads, safety and serviceability, procedure of using the national building code for evaluating the governing loads on structural members; approximate analysis of structures; structural forms for low rise structures; design of low rise and steel buildings; lateral load-resisting elements and bracing systems.
LH: 2
OR: 1 hour tutorial per week
PR: ENGI 7704
8708 Offshore Structural Design examines guidelines and international codes and standards for offshore structural design; understanding design constraints and concepts of offshore fixed and floating structures; design consideration for fixed offshore concrete platform; design consideration for offshore platform and floating production system design, and analysis of various support systems of the offshore structure.
PR: ENGI 7707
8713 Municipal Engineering includes water supply system overview; water consumption estimation; groundwater and surface water sources; oxygen demand and transfer; water treatment processes; water distribution systems and design software; sewer systems and design software; wastewater treatment processes; sludge handling; decentralized and on-site wastewater treatment.
PR: ENGI 7716
8717 Environmental Assessment, Monitoring and Control covers statistical analysis; pollution monitoring, and sampling hetwork design; water quality and air quality modelling; environmental risk assessment; environmental impact assessment; site remediation and hazardous waste management. There are relevant field trips and case studies.
LH: at least ten 3-hour lab sessions per semester
PR: ENGI 4717
8740 Contract Law and Labour Relations is an introduction to law as it applies to engineering activity; the nature of law and legal processes, including standard forms; liens, bonds and insurances; the labour movement in North America; examination of union philosophies and managerial attitudes; labour law and collective bargaining; disputes and settlements.
CR: the former ENGI 6740
PR: completion of Term 7 of the Civil Engineering program
8751 Coastal and Ocean Engineering examines the coastal and ocean environment; ocean circulation and properties; waves and tides; instrumentation and measurement. Additional topics will be drawn from the areas of hydraulic, geotechnical and structural engineering. Relevant field exercises will be conducted.
PR: ENGI 6713
8814 Computer Vision (same as Computer Science 4301) studies how to develop methods that enable a machine to "understand" or analyze images. The course introduces the fundamental problems in computer vision and the state-of-the-art approaches that address them. Topics include feature detection and matching, geometric and multi-view vision, structure from X, segmentation, object tracking and visual recognition.
CR: Computer Science 4301
LH: six 3-hour sessions per semester
PR: ENGI 7854 or Computer Science 3301 or permission of the instructor

8815-8820 Special Topics in Computer Engineering will have topics to be studied announced by the Faculty.

8821 Design of Digital Signal Processing Systems is a review of introductory digital signal processing (DSP) principles, including sampling theory and discrete-time systems and signals. Topics include transform analysis of DSP systems; issues in the implementation of DSP systems; design of IIR and FIR digital filters; computable transforms and their use in the frequency analysis of digital signals; and design of DSP systems for current and emerging applications of digital signal processing.
PR: ENGI 7824
8826 Filter Synthesis begins with an introduction to analog filters. The course examines descriptive terminology, transfer functions and frequency response of filters; design of first order passive and active filters; design and analysis of biquad circuit, Sallen key circuit, multiple feedback circuit and state variable filter; RC-CR transformation; inductance simulation circuit; cascade design principle; design of filters with maximally flat magnitude response; design of filters with equal ripple magnitude response; design of Bessel-Thomson filters; analysis and design of switched capacitor filters; and the use of Matlab for design of analog filters.
LH: at least four 3-hour sessions per semester
PR: ENGI 5854
8845 Power System Operation examines symmetrical components; power system fault analysis; power system stability; and power system protection.
LH: four 3-hour sessions per semester
PR: ENGI 7844
8853 Electrical Engineering Design Project II continues ENGI 7803 and provides an opportunity for senior students to integrate the knowledge that they have acquired through the junior terms and apply it to solving an electrical engineering design problem. Students work in small teams with the assistance of a faculty mentor to complete detailed design, implementation and testing of an electrical engineering system to solve the problem as defined in 7803.
CR: the former ENGI 8800
LC: 0
OR: weekly meetings with project supervisor
PR: 7803
8854 Computer Engineering Design Project II continues ENGI 7804 and provides an opportunity for senior students to integrate the knowledge that they have acquired through the junior terms and apply it to solving a computer engineering design problem. Students work in small teams with the assistance of a faculty mentor to complete detailed design, implementation and testing of an computer engineering system to solve the problem as defined in 7804.
CR: the former ENGI 8800
LC: 0
OR: weekly meetings with project supervisor
PR: 7804
8863 Introduction to VLSI Design is an introduction to ASICs and ASIC design methodology and includes basic concepts of digital logic design tools and ASIC technology libraries; partitioning for logic synthesis and VHDL coding; constraining designs, synthesizing, simulation and optimization; design for testability; layout and post-layout optimization and SDF generation; and static timing analysis.
CR: the former Computer Science 4725
LH: eight 3-hour sessions per semester
OR: eight 1-hour tutorial sessions per semester
PR: ENGI 5865
8868 Cryptography examines the techniques used to provide security in communication networks and computer systems. The course focuses on topics in cryptography required to provide privacy, authentication, and integrity, including symmetric key ciphers, public key ciphers, message authentication, and digital signature schemes.
PR: ENGI 6876
8877 Wireless and Mobile Communications (same as the former ENGI 8804) covers the fundamentals and main concepts of wireless and mobile communication systems focusing on the system level design and performance. Main topics to be covered include Introduction to Wireless Communication Systems, Wireless Channel Models, Frequency Reuse Concept, Wireless Multiple Access Techniques (TDMA, FDMA, CDMA), Orthogonal Frequency Division Multiplexing (OFDM), Wireless Systems (GSM, 3G, LTE, etc.).
CR: the former ENGI 8804
PR: ENGI 6871, ENGI 6876
8879 Digital Communications is a review of baseband transmission and basic digital modulation schemes, detection (optimum receiver, matched filter, correlator), error performance, intersymbol interference (ISI), equalization, the concept of information and entropy, source coding including Huffman coding and linear predictive coding, channel coding including block and convolutional error correcting codes, modulation and coding trade-offs, bandwidth and power efficiency.
PR: ENGI 6871
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=\mathrm{Prerequisite(s);}$ UL = Usage limitation(s).

8894 Real-time Operating Systems examines real-time process scheduling; memory and device management; I/O communications; realtime systems; operating system and hardware concurrency issues; kernel architectures; device drivers; and a survey of available real-time operating systems and embedded platforms.
CR: the former ENGI 7863, Computer Science 4721
LH: four 3-hour sessions per semester
PR: ENGI 7894
8903 Design of Thermal Systems examines thermal system design; modeling of thermal systems; steady and transient system simulation; single and multi-variable optimization; overall system performance; thermodynamic optimization; selected design case studies.
PR: ENGI 7901, ENGI 7903
8911 Corrosion and Corrosion Control examines forms of corrosion; the electrochemical nature of the corrosion process; the mixed potential theory, Purbaix diagrams and Evan diagrams; corrosion testing, control use by use of materials, selection, cathodic protection, inhibitors, and coatings. There are case studies of selected corrosion problems.
CR: the former ENGI 8962
LH: at least five 3-hour sessions per semester
8926 Mechanical Design Project II is the second of two capstone design courses in the Department of Mechanical Engineering. Building on skills acquired in the first, student teams each choose a unique design challenge and then proceed to generate a solution. The problem statements are often drawn from industry and, where possible, interdisciplinary interaction is encouraged (for example, with business, computer science, or other engineering disciplines). In most cases, the problem proponent will act as the "client" and the team is expected to manage the client interaction process as well. Significant emphasis is placed on both oral and written communication of both the process and results. Wherever possible, each system or a critical component of it, will be prototyped and tested.
CR: the former ENGI 8936
LC: scheduled as required
LH: scheduled as required
PR: ENGI 7926
8933 Fatigue and Fracture Mechanics is an introduction to fatigue and fracture analysis of metallic components, failure mechanisms, fracture mechanisms, effects of cracks, notches, collapse; linear elastic fracture mechanic analysis; design of components to avoid fracture; fatigue crack propagation, fracture initiation, crack arrest; and fracture toughness measurements.

PR: ENGI 5931
8935 Pressure Component Design includes pressure vessel design philosophy; membrane theory of shells; stress categories; discontinuous stresses; design of pressure vessel components according to ASME Boiler and pressure vessel and piping codes. There is a design project involving pressure vessel components.
OR: at least 1 tutorial hour per week
PR: ENGI 5931, ENGI 6929
8937 Machine Dynamics reviews mechanism kinematics and inverse dynamics (prediction of unknown forces and torques required to create a known motion) and continues with forward dynamic analysis of mechanisms (predicting unknown motion due to applied forces and torques) using student-generated computer code and commercial software. Practical applications of dynamics are explored, such as engine shaking forces, balancing of machinery, shaft vibration, design of flywheels, and gyroscopic effects.
CR: the former ENGI 7945
PR: ENGI 4932, 6933
8945 Production \& Operations Management is an overview of production and operations management, and an examination of decision making and operations strategy; process design and improvement, process flow analysis/simulation, capacity planning; design of value chains, lean systems, plant layout and process planning; operating value chains, MIS systems, inventory and resource management; Relevant computer laboratory exercises are conducted.
CR: the former ENGI 7943
PR: ENGI 6901
8946 Modelling and Simulation of Dynamic Systems emphasizes interdisciplinary system models, equation formulation and structure, and model complexity. The bond graph modelling language will be introduced to simulate systems containing mechanical, electrical, thermal, hydraulic, and magnetic components.
CR: ENGI 9496
PR: ENGI 5952
8947 Computational Fluid Dynamics begins with a review of the equations governing viscous fluid flows and heat transfer. The course includes heat conduction, convection-diffusion, and fluid flow equations; gridding, dependent variable interpolation, discretized equations, solution of the
discretized equations, transients and nonlinearities; testing and validation of CFD codes, standard test problems.
CR: ENGI 9977
PR: ENGI 5962 or the former ENGI 6961
8964 Fluid Structure Interactions examines structural vibrations generated by fluid flow. These vibrations can be transient or they can take the form of instability or resonance. The course deals with the following fluid structure interactions: (1) Flow induced vibration of structures (2) Unsteady flow in pipe networks (3) Water wave interactions with structures.
CR: the former ENGI 8904
LH: at least three 3-hour sessions per semester
PR: ENGI 5962 or the former ENGI 6961, ENGI 6933
8965 Advanced Fluid Dynamics includes fluid kinematics; equations of fluid dynamics: Navier-Stokes equations, Euler's equations, Stokes' equations, vorticity transport; advanced topics in: low Reynolds flows, unsteady viscous flows, boundary layer analysis, potential flows; introduction to turbulent flow; free shear flows.
CR: ENGI 9901
PR: ENGI 5962 or the former ENGI 6961
8970 Gas Dynamics begins with an introduction to compressible gas flows, then considers fundamental laws of compressible fluid flow; wave propagation in compressible fluids; isentropic flow of a perfect gas; normal and oblique shock waves; Prandtl-Meyer flows; external compressible flows; flow in ducts, flow with friction (Fanno) and heat transfer (Rayleigh); imperfect gas effects; and measurement of compressible flows.
PR: ENGI 5962
8971 Welding and Joining Processes introduces modern welding and joining processes for metallic materials, polymers; and ceramics. Fundamentals of materials joining processes and the impact of the process parameters on the weld geometry, mechanical properties, and quality are discussed. Laboratory exercises will provide hand's-on experience with some industrially significant welding processes.
LH: four 3-hour sessions per semester.
OR: tutorial 1 hour per week
PR: ENGI 5911
8982 Mechanical Behaviour of Composites includes stress-strain behaviour of composites, properties of matrix and reinforcing materials, mechanies of fibre-reinforced composites, lamina and laminate analysis, and an introduction to manufacturing methods.
OR: tutorial 1 hour per week
PR: ENGI 4934
8984 Sustainable Energy Systems examines thermo-fluid features of energy conversion and storage technologies. Topics include nuclear power, wind power, biorenewable and nonconventional fuels, fuel cells, carbon capture and sequestration, photovoltaics, solar thermal, energy storage, and hydroelectric power systems.
PR: ENGI 4961, ENGI 6901

### 11.9 Special Topics Courses

8076-8099 Special Topics in Ocean and Naval Architectural Engineering will have topics to be studied announced by the Faculty.

8102-8149 Special Topics in Engineering will have topics to be studied announced by the Faculty.
8601-8610 Special topics in Process Engineering will have topics to be studied announced by the Faculty.

8625-8639 Special topics in Process Engineering will have topics to be studied announced by the Faculty.

8765-8799 Special Topics in Civil Engineering will have topics to be studied announced by the Faculty.
8801-8805 (Excluding 8804) Special Topics in Computer Engineering will have topics to be studied announced by the Faculty.

8806-8809 Special Topics in Electrical Engineering will have topics to be studied announced by the Faculty.
8815-8820 Special Topics in Computer Engineering will have topics to be studied announced by the Faculty.

8833-8840 Special Topics in Electrical Engineering will have topics to be studied announced by the Faculty.
8972-8994 (Excluding 8977, 8981, 8982, 8984, 8991) Special Topics in Mechanical Engineering will have topics to be studied announced by the Faculty.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).


## FISHERIES AND MARINE INSTITUTE

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www.mi.mun.ca

## Vice-President (Marine Institute)

Blackwood, G., B.Sc.(Hons.), M.A. Memorial
Up-to-date personnel listings are available at www.mi.mun.ca/departments.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 School Description

The Fisheries and Marine Institute was established in 1964 as the College of Fisheries, Navigation, Marine Engineering and Electronics. It became affiliated with the University in 1992 and since then has continued to grow as a world-class centre of marine technology and education. The official name is the Fisheries and Marine Institute of Memorial University of Newfoundland, but it is commonly known as the Marine Institute.
The main campus of the Marine Institute overlooks the city of St. John's from within Pippy Park, which has extensive hiking trails and recreational facilities. This building houses a flume tank, a seafood processing plant, freshwater aquaculture research and development facilities, and extensive marine simulation facilities. The Dr. C. R. Barrett Library, located at this campus, houses one of Canada's largest marine-related collections. In addition, the Institute manages the Offshore Safety and Survival Centre (OSSC) in Foxtrap, the Safety and Emergency Response Training (SERT) Centre in Stephenville, a regional fisheries and marine training center in Lewisporte, and a marine base in Holyrood.
The Marine Institute provides a full range of programs focussing on fisheries and marine science and technology. In addition to undergraduate and graduate degrees, the Institute offers advanced diplomas, diplomas of technology, and technical and vocational certificates. The Institute also runs a variety of short courses and industrial response programs.
All programs and courses are designed to provide students with the knowledge and skills required for success in the workforce. The Institute seeks the advice of industrial program advisory committees in the ongoing development and review of programs. Whenever appropriate, it submits programs for national accreditation, providing graduates with mobility in professional employment.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information concerning scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 The Marine Institute Students' Union (MISU)

The Marine Institute Students' Union (MISU) was incorporated in 1991. It is committed to the provision of services to students as well as representing the student body at the national, provincial and institute levels in matters affecting the quality of student life.
The MISU is a prominent member of the Canadian Federation of Students (CFS). The CFS provides a voice for students at over 70 universities, colleges, and technical institutes across Canada including more than 32,000 students in Newfoundland and Labrador. The national body has a strong presence in Ottawa and ensures students' opinions are known on Parliament Hill. Services provided by CFS include the National Student Health Network, student saver cards, Student Work Abroad Program (SWAP), International Student Identity Cards (ISIC), and Travel Cuts. The CFS Newfoundland and Labrador (CFS-NL) ensures students' opinions are known in the Provincial House of Assembly. The MISU takes part in the CFS bi-annual conferences to discuss and form policies on behalf of students.
Within the Institute, the MISU has representation on a number of committees, including the Marine Institute Industry Advisory committee and the Academic Council, where the Union members ensure that student well-being is at the forefront in all policies affecting student life. The MISU administers the student health plan. Many social and recreational activities are planned and sponsored by the MISU including Winter Carnival held during the last week of January. Profits from the social activities are returned to the students in the form of scholarships. The MISU manages and maintains the student lounge -The Mariner's Lounge.

## 4 Description of Degree Programs

Students must meet all regulations of the Marine Institute in addition to those stated in the UNIVERSITY REGULATIONS - General
Academic Regulations (Undergraduate). For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information about non-degree programs and upgrading opportunities refer to www.mi.mun.ca.

### 4.1 General Degrees

The Marine Institute offers two undergraduate degrees. For specific details on each degree refer to the appropriate Degree Program Regulations. The courses in the program are available fully by distance and select courses are available on campus.

### 4.1.1 Bachelor of Maritime Studies

The Bachelor of Maritime Studies program prepares graduates for career advancement in Maritime Management or Safety Management industries. It is designed for students who have graduated from an accredited diploma of technology program that is applicable to one of two major areas of study. Courses in the program provide the student with an introduction to human resource and business management concepts and the social contexts in which their careers will be based. The program consists of 39 credit hours in addition to work completed in a diploma program and can be taken on a full-time or part-time basis.
The major areas of study are:

### 4.1.1.1 Major in Maritime Management

The Major in Maritime Management is normally chosen by students who have graduated from accredited, or Transport Canada approved, diploma of technology programs in the marine fields.

### 4.1.1.2 Major in Safety Management

The Major in Safety Management is open to all students eligible for the Major in Maritime Management but also includes any student holding a three-year CTAB or TAC accredited technology diploma or those having a CRSP designation.

### 4.1.2 Bachelor of Technology

The Bachelor of Technology program prepares graduates for career advancement in health science technology or engineering/applied science technology industries. It is designed for students who have graduated from an accredited diploma of technology program that is applicable to one of two major areas of study. Courses in the program provide the student with an introduction to human resource and business management concepts, and the social contexts in which their careers will be based. The program consists of 39 credit hours in addition to work completed in a diploma program and can be taken on a full-time or part-time basis.
The major areas of study are:

### 4.1.2.1 Major in Engineering and Applied Science Technology

The Engineering and Applied Science Technology Major is normally chosen by students who have an engineering/applied science technology diploma.

### 4.1.2.2 Major in Health Sciences Technology

The Health Sciences Technology Major is normally chosen by students who have a health sciences technology diploma.

## 5 Admission/Readmission Regulations for Degree Programs

In addition to meeting the admission/readmission requirements for the University, students must also meet the admission/readmission requirements for the Marine Institute. See UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate) for University requirements.

### 5.1 General Information

1. The application for admission or readmission is submitted online; current and returning Marine Institute applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to the Marine Institute should follow the application instructions at www.mun.ca/undergrad/apply.

Table 1 Application Deadlines

| Fall | June 30 (Official transcripts due July 15) |
| :--- | :--- |
| Winter | October 15 (Official transcripts due October 30) |
| Spring | March 15 (Official transcripts due March 30) |

2. Students may not obtain both a Bachelor of Maritime Studies and a Bachelor of Technology degree based upon completion of the same diploma of technology
3. Students may not obtain a Bachelor Maritime Studies in more than one major. Students wishing to further their studies in either Maritime Management or Safety Management are strongly encouraged to apply to the School of Graduate Studies for either the Master of Maritime Management program or the Post Graduate Certificate in Safety Management.

### 5.2 Admission Requirements for Applicants to the Bachelor of Maritime Studies Program

1. The application for admission or readmission is submitted online; current and returning Marine Institute applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to the Marine Institute should follow the application instructions at www.mun.ca/undergrad/apply. This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.
2. Categories for admission to the Bachelor of Maritime Studies, Major in Maritime Management

Applicants must meet the general admission/readmission requirements of the University and be eligible for admission to the Bachelor of Maritime Studies, Major in Maritime Management program in one of the following categories:

- Gategory A: applicants holding a diploma from the Marine Institute in nautical science, marine engineering technology, naval architecture technôlogy or marine engineering systems design technology,
- Category B: applicants holding a Canadian Technology Accreditation Board accredited, or Transport Canada approved, diploma in marine engineering technology or nautical science,
Category C: applicants holding a Canadian or non-Canadian diploma similar to an accredited or Transport Canada approved Marine Institute diploma in nautical science, marine engineering technology, naval architecture technology or marine engineering systems design technology,
- Category D: applicants holding a Transport Canada Certificate of Competency at the Master Mariner, Fishing Master First Class or Engineering First Class level or equivalent,
- Category E: applicants who have Canadian Forces (Naval Operations) training acceptable to the Admissions Committee.

3. Categories for admission to the Bachelor of Maritime Studies, Major in Safety Management

Applicants must meet the regular admission requirements of the University and be eligible for admission to the Bachelor of Maritime Studies - Major in Safety Management program in one of the following categories:

- Category A: applicants holding a diploma from the Marine Institute in nautical science, marine engineering technology, naval architecture technology, marine engineering systems design technology, marine environmental technology, or food technology
- Category B: applicants holding a diploma of technology in engineering/applied science technology accredited by the Canadian

Technology Accreditation Board (CTAB), or Technology Accreditation Canada (TAC);

- Category C: applicants holding a diploma of technology comparable to a Marine Institute or College of the North Atlantic threeyear accredited diploma;
- Category D: applicants who have Canadian Forces training acceptable to the Admissions Committee;
- Category E: applicants who hold a Canadian Registered Safety Professional (CRSP) designation.

4. Applications to the program will be considered by the appropriate admissions committee(s).
5. In accordance with the UNIVERSITY REGULATIONS - Residence Requirements - Second Degree, students completing the Bachelor of Maritime Studies program, as a second degree, must complete all required courses in their major area of study within the Bachelor of Maritime Studies program.

### 5.3 Admission Requirements for Applicants to the Bachelor of Technology Program

1. The application for admission or readmission is submitted online; current and returning Marine Institute applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/wbkwbis.P_WWWLogin. Applicants who are new to the Marine Institute should follow the application instructions at www.mun.ca/undergrad/apply. This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.
2. Categories for admission to the Bachelor of Technology Program

Applicants must meet the regular admission requirements of the University and be eligible for admission in one of the following categories:

- Category A: applicants holding a diploma of technology, excluding nautical science, from the Marine Institute,
- Category B: applicants holding a diploma of technology accredited by the Canadian Technology Accreditation Board (CTAB) or Technology Accreditation Canada (TAC), or the Canadian Medical Association (CMA),
- Category C: applicants holding a diploma of technology comparable to a Marine Institute diploma of technology,
- Category D: applicants holding a Certified Engineering Technologist (CET) designation or a Professional Technologist (PTech) designation along with a diploma of technology acceptable to the Admissions Committee,
- Category E: applicants who have Canadian Forces training acceptable to the Admissions Committee
- Category F: applicants who hold a diploma of technology from an institution with which the Marine Institute has an articulation agreement.

3. Upon acceptance into the program, students will be admitted to one of the two majors: the Major in Engineering and Applied Science Technology or the Major in Health Sciences Technology. Students may be permitted to change their major with the approval of the Marine Institute Committee on Undergraduate Studies.
4. Applications to the program will be considered by the appropriate admissions committee(s).
5. In accordance with the UNIVERSITY REGULATIONS - Residence Requirements - Second Degree, students completing the Bachelor of Technology program, as a second degree, must complete all required courses in their major area of study within the Bachelor of Technology program.

## 6 Degree Program Regulations

### 6.1 Bachelor of Maritime Studies

### 6.1.1 Maritime Management Major

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in Table 2 Bachelor of Maritime Studies - Maritime Management Major.
- A maximum of 9 transfer credit hours applicable to the degree may be used to meet the degree requirements.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Maritime Studies a candidate shall successfully complete the following program with a minimum overall average of $60 \%$ and a minimum numeric grade of $50 \%$ in each course required for the degree unless stated otherwise within the course description.
- Students must take 39 credit hours with 21 credit hours from the required courses and 18 credit hours from the electives.
- At least three electives must be chosen from Group A and at least one elective must be chosen from Group B.

Table 2 Bachelor of Maritime Studies - Maritime Management Major


- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in Table 3 Bachelor of Maritime Studies - Major in Safety Management.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Maritime Studies a student shall successfully complete the program with a minimum overall average of $60 \%$ and a minimum numeric grade of $50 \%$ in each course required for the degree unless stated otherwise within the course description.
- Students must take 39 credit hours with 27 credit hours from the required courses and 12 credit hours from the electives.
- At least two electives must be chosen from Group A and at least one elective must be chosen from Group B.

Table 3 Bachelor of Maritime Studies - Safety Management Major

| Required Courses | Group A Electives | Group B Electives |
| :--- | :--- | :--- |
| 3 credit hours in a Critical Reading and Writing | MARI 4001 | Business 1101 or 2102 |
| (CRW) course | MARI 4008 | MARI 4002 |
| MARI 4004 | MARI 4112 | MARI 4106 |
| MARI 4101 | MARI 4113 | TECH 4019 |
| MARI 4104 | MARI 4114 | TECH 4040 |
| MARI 4107 | TECH 4025 or Statistics 1510 or 2500 | Philosophy 1100 |
| MARI 4108 |  | Philosophy 2330 |
| MARI 4109 |  | Sociology 2120 or TECH 4030 |
| MARI 4110 |  |  |
| MARI 4111 |  |  |

### 6.2 Bachelor of Technology

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in Table 4 Bachelor of Technology - Engineering and Applied Science Technology Major and Table 5 Bachelor of Technology - Health Science Technology Major.
- A maximum of 9 transfer credit hours applicable to the degree may be used to meet the degree requirements.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Technology a candidate shall successfully complete the program with a minimum overall average of $60 \%$ and a minimum numeric grade of $50 \%$ in each course required for the degree unless stated otherwise within the course description.


### 6.2.1 Engineering and Applied Science Technology Major

- Students must take 39 credit hours with 24 credit hours from the required courses and 15 credit hours from the electives.
- At least one elective must be chosen from each of the groups $A$ and $B$.

Table 4 Bachelor of Technology - Engineering and Applied Science Technology Major

| Required Courses | Group A Electives | Group B Electives |
| :---: | :---: | :---: |
| 3 credit hours in a Critical Reading and Writing (CRW) course <br> TECH 4010 <br> TECH 4019 <br> TECH 4020 <br> TECH 4025 or Statistics 1510 or 2500 or equivalent <br> TECH 4040 <br> TECH 4060 <br> TECH 4400 | Business 1101 or 2102 <br> Business 4000 <br> Economics 3360 <br> MARI 4008 <br> TECH 4011 <br> TECH 4012 <br> TECH 4013 <br> TECH 4017 <br> TECH 4050 <br> TECH 4070 <br> TECH 4080 <br> TECH 4090 or Business 1000 | Economics 1010 or the former 2010 <br> Economics 1020 or the former 2020 <br> Economics 3080 <br> TECH 4014 <br> TECH 4015 <br> TECH4016 <br> TECH 4030 or Sociology 2120 or Geography 3015 or Sociology 3015 $\text { TECH } 4055$ <br> Philosophy 1100 <br> Philosophy 2330 or the former 2571 |

### 6.2.2 Health Science Technology Major

- Students must take 39 credit hours with 18 credit hours from the required courses and 21 credit hours from the electives.
- At least one elective must be chosen from each of the groups $A, B$, and $C$.

Table 5 Bachelor of Technology - Health Science Technology Major

| Required Courses | Group A Electives | Group B Electives | Group C Electives |
| :---: | :---: | :---: | :---: |
| 3 credit hours in a Critical Reading and Writing (CRW) course <br> TECH 4019 <br> TECH 4025 or Statistics 1510 or 2500 or equivalent <br> TECH 4040 <br> TECH 4060 <br> TECH 4400 | Business 1101 or 2102 <br> Business 4000 <br> Economics 3360 <br> MARI 4008 <br> TECH 4011 <br> TECH 4012 <br> TECH 4013 <br> TECH 4017 <br> TECH 4050 <br> TECH 4090 or Business 1000 | Economics 1010 or the former 2010 <br> Economics 1020 or the former 2020 <br> Economics 3080 <br> TECH 4014 <br> TECH 4015 <br> TECH 4016 <br> TECH 4030 or Sociology 2120 or Geography 3015 or Sociology 3015 <br> TECH 4055 <br> TECH 4080 <br> Philosophy 1100 <br> Philosophy 2100 or the former 2551; 2110 or the former 2553; 2120 or the former 2552 <br> Philosophy 2330 or the former 2571 | Biology 2040 or 2041 <br> Psychology 1000 <br> Psychology 2010 <br> Psychology 2020 <br> Psychology 2030 <br> Psychology 2800 <br> TECH 4110 |

## 7 Waiver of Degree Program Regulations

Students requesting waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations. Every student also has the right to request waiver of degree program regulations.

### 7.1 General Information

- The Marine Institute reserves the right in special circumstances to modify, alter, or waive any Marine Institute regulation in its application to individual students where merit and equity so warrant, in the judgement of the Committee on Undergraduate Studies of the Marine Institute.
- Students requesting a waiver of a Marine Institute regulation must submit their request in writing to the head of the program who will forward a recommendation to the Chair of the Committee on Undergraduate Studies of the Marine Institute. Medical and/or other documentation to substantiate the request must be provided.
- Any waiver granted does not reduce the total number of credit hours required for the degree.


## 8 Graduation

Upon meeting the qualifications for any of the degree programs of the Fisheries and Marine Institute a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www.mun.ca/regoff/stuweb.htm. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 9 Appeal of Decisions

Any student whose request for waiver of Marine Institute regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 10 Course Descriptions

### 10.1 Maritime Studies

Maritime Studies courses are designated by MARI.
4001 The Organization and Issues of Shipping (same as the former MSTM 4001) provides students with knowledge of the economic shipping environment with respect to Canada. The course will develop an understanding of basic trade theory, patterns of trade and sea routes, commodities traded by sea, and the organizational structure of shipping companies.

CR: the former Engineering 8065; the former MSTM 4001
4002 The Business of Shipping (same as the former MSTM 4002) provides students with an understanding of financial statements, costs, revenues and financial performance of shipping companies as well as computing, voyage and annual cashflows. The course will develop an understanding of marine insurance and forecasting, and risk management.
CR: the former MSTM 4002
PR: MARI 4001
4004 Marine Environmental Management (same as the former MSTM 4004) introduces students to the requirements for the safe management of the marine environment. This course will introduce major environmental problems and identify the major threats to the marine environment. It will provide a working knowledge of these threats and consider the possible counter measures that may be employed by employees in the marine industry.

CR: the former MSTM 4004
4005 Trends and Issues in International Shipping (same as the former MSTM 4005) provides students with an understanding of how regulatory bodies and their legislation have evolved to affect the modern seafarer trading internationally. This course will develop an understanding of the various rules and regulations dealing with Classification, ISM, MAPROL, SOLAS and SIRE inspections which have to be dealt with on a daily basis at sea.
CR: the former MSTM 4005
4006 Maritime Human Resource Management (same as the former MSTM 4006) provides basic principles of HRM in terms of seagoing and shore-based personnel. Students will analyze the world maritime labour market, HRM practices, outsourcing and international conventions. This course stresses the importance of coherent maritime HRM systems required to gain a sustainable competitive advantage.
CR: the former MSTM 4006
4007 Shipping Finance (same as the former MSTM 4007) focuses on commercial ship management and the critical evaluation of alternative financial decisions. It analyzes the principles of financial ship management and the impact of global economic variables on the financial operations and performance of shipping companies. The course provides an appreciation of critical questions, problems, issues and alternative approaches incorporated in shipping finance. This will support and facilitate the conduct of meaningful
financial analysis and managerial decision- making for investments and fund raising in shipping business.
CR: the former MSTM 4007
4008 Introduction to Offshore Oil and Gas (same as the former MSTM 4008) provides students with an understanding of the basic concepts of the oil and gas industry from a marine perspective. This course will cover the entire supply chain and industry structure from upstream to downstream. Topics discussed will give an overview of oil and gas; how it is explored and evaluated, extracted, refined, transported and traded.
CR: the former MSTM 4008
4101 Maritime Occupational Safety and Health (Legislation and Regulations) (same as the former MSTM 4101) provides students with the knowledge and understanding to manage the legislative framework within the workplace and show the importance of establishing a positive safety culture with specific focus on the maritime industry.

## CR: the former MSTM 4101

4102 Maritime Risk Management/Accident Incident Investigation (same as the former MSTM 4102) provides students with the knowledge of methodologies and practices needed to manage operational risk in today's maritime industry. Risk management will be analyzed in the context of prevention and mitigation of loss resulting from health and safety, equipment, and environmental accidents and incidents. The course will further explore methodologies and practices used to investigate accident and incident occurrences in the maritime industry.
CR: the former MSTM 4102
4103 Advanced Communications for the Maritime Sector (same as the former MSTM 4103) equips students to write a variety of formal and informal maritime-related technical documents; develops students' capabilities in gathering and critically analysing information from technical sources and constructing a clear message; and prepares students to develop and deliver oral technical presentations.
CR: the former MSTM 4103
4104 Integrated Management Systems in Maritime Industries (same as the former MSTM 4104) offers a firsthand knowledge of a systematic, comprehensive process for managing safety risks. A safety management system program provides for goal setting, planning, and measuring performance. It becomes part of the company's safety culture, as well as the way people do their jobs.
CR: the former MSTM 4104
4105 Policy and Governance in the Maritime Industry (same as the former MSTM 4105) provides the student with an understanding of the maritime industry as a global enterprise in the context of policy and governance. It will focus on the full range of the regulatory framework from the standpoint of the International Maritime Organization to the statutory regulations applicable to the Canadian maritime industry.
CR: the former MSTM 4105
4106 Ship Operations Management (same as the former MSTM 4106) provides comprehensive knowledge of global ship management practices supporting the function of ship operations management, both ashore and at
sea. This course aims to develop the student's understanding of management issues in marine transportation as they relate to basic principles of management; management in multi-ethnic environments; managing under adverse conditions; the SOLAS Convention and the ISM and ISPS Codes; the International Labour Organization and the MLC Convention; the International Transport Federation; and, Port State Control.
CR: the former MSTM 4106
4107 Communications and Conflict Management provides students with the knowledge, tools and strategies to effectively manage and resolve conflicts in the workplace. The necessary communication skills taught in this course will allow students to respond to interpersonal and organizational conflicts in a collaborative manner to ensure a safe and productive workplace.

4108 Emergency Management and Preparedness in the Maritime Sector introduces the emergency management concepts, theories and skills required to assume a command or support role in an emergency situation at sea. The course introduces the student to key positions, responsibilities and expectations of the marine emergency team. Relevant legislation, guidelines and differences between the shipping industry and offshore oil and gas industry regarding their operational structures and emergency management operational plans will also be investigated.

4109 Human Factors in the Maritime Sector addresses the application of our understanding of human characteristics to the design of equipment and environments in which people perform and learn. Framed within a maritime context, this course provides an overview of human capabilities and limitations, and how they interact with the design, use and learning of systems, controls and displays.
4110 Risk Management in the Maritime Sector provides a solid grounding in knowledge and skills required to interpret, evaluate, communicate, and manage risk in the maritime sector. Utilizing a variety of case studies, the course covers risk assessment methodologies and provides a practical approach to conducting, reviewing, and evaluating risk assessments. The course reviews regulatory requirements and discusses the importance and challenges (including the human element) of effective risk management. Students will also conduct article reviews as part of their study.

4111 Incident/Accident Investigation in the Maritime Sector provides a solid grounding in the knowledge and skills required to conduct a near-miss and incident / accident investigation. Utilizing a variety of case studies, the course covers incident investigation / root cause analysis methodologies and provides a framework to conduct an investigation, analyse the information, implement corrective actions, and write the investigation report. Students will also review and critique investigation reports as part of their study.

4112 Quality Systems and Organizational Management examines the theory and application of quality management systems (QMS). It also provides direction for the integration of a QMS into an overall management system that addresses occupational health and safety as well as environment.

4113 Maritime Security Management examines contemporary port, coastal and ocean security issues. It explores the roles of national and international agencies, international conventions, security audits, and inspections. The course also explores maritime security risk assessment methodologies that enable organizations to make organizational and operational decisions to mitigate maritime security risks. Utilizing a variety of case studies and security assessment methodologies the course will provide a practical approach to conducting, reviewing, and evaluating maritime security risk assessments.

4114 Maritime Environmental Health focuses on the rise in the number of work-related diseases worldwide, relative to traumatic injuries, which has led to an increased focus on occupational health hazards in the workplace. Exposure to physical, chemical, biological, psychosocial and ergonomic factors as major concerns in occupational health and safety, as well as an awareness of these hazards and the associated health effects as an important step in their recognition and control, will also be covered.
PR: MARI 4101 or the former MSTM 4101

### 10.2 Technology

## Technology courses are designated by TECH.

4010 Assessment and Implementation of Technology (same as the former MSTM 4010) examines the effects of technology on the physical, socio-economic, historic, cultural and aesthetic environments. The course also addresses relevant legislation, the generation and evaluation of project/ product alternatives, and the prediction, verification and mitigation of technological effects.

## CR: the former MSTM 4010

4011 Introduction to Intellectual Property and its Management (same as the former MSTM 4011) introduces students to the management of Intellectual Property Rights (IPRs). This course will cover the philosophical rationale for intellectual property rights, its technical and legal
considerations, its implications to the development of science and technology and its economic impact in society.
CR: the former MSTM 4011
4012 Occupational Health and Safety Legislation and Management (same as the former MSTM 4012) introduces students to occupational health and safety issues in a technical/industrial context. Students will gain a knowledge and understanding of the legislative framework surrounding occupational health and safety, the assignment of responsibilities in the workplace, the management of occupational health and safety in the workplace and the importance of establishing a positive safety culture.
CR: the former MSTM 4012
4013 Structure and Functions of Technology-based Organizations (same as the former MSTM 4013) focuses on the emergence of technologybased companies and how to implement methods to increase their organizational effectiveness. This course will concentrate on the integration of three basic frameworks which include the study of technological economics and organizational progression, structural configurations and operations, and universal and contemporary approaches to organizational design. In addition, it will examine the challenges of change that face highly dynamic industries: individual and organizational change, technological change, and national and global change.
CR: the former MSTM 4013
4014 Technology and the Environment (same as the former MSTM 4014) helps students critically examine technology and the environment and how the two are linked. Topics may include how technology is both the cause of and solution to many environmental problems, the greenhouse effect, renewable energy vs. fossil fuels, recycling vs. landfills, the efficiency paradox, geo-engineering, and other select current topics.
CR: the former MSTM 4014
4015 Technological Entrepreneurship (same as the former MSTM 4015) surveys technological entrepreneurship via examples of both successful and failed businesses in technological fields. By examining cases of entrepreneurship, this course will examine challenges and opportunities facing technological entrepreneurs.

## CR: the former MSTM 4015

4016 Technological Problem Solving (same as the former MSTM 4016) introduces students to TRIZ, a powerful set of tools and algorithms developed specifically for analyzing and solving technological problems. TRIZ was developed by people with a technical background for those with a technical background, While TRIZ was developed for inventing and solving technical problems, the tools and approaches can be used to understand and solve virtually any solvable problem.
CR. the former MSTM 4016
4017 Technical Operations Management (same as the former MSTM 4017) introduces students to the area of operations management as it pertains to technology companies. Operations is generally considered the process by which an organization converts inputs such as labour and material into outputs such as goods or services. This course will examine how to manage the processes with a particular emphasis on operations in technology-based companies. Topics may include operations based strategy, processes and technology, capacity and facilities planning, and supply chain management.
CR: the former MSTM 4017
4019 Research Methods (same as the former MSTM 4019) examines the fundamental steps in the process of doing research. It will provide students with the necessary information and tools to conduct technical research and communicate their findings. This course will examine how to define a research project, how to prepare a research proposal, how to select a research methodology, how to collect and analyze data and information, and how to prepare a research project report.

## CR: the former MSTM 4019

4020 Economic Management for Technologists (same as the former MSTM 4020) provides an introduction to the economics of technological projects. Students will study the mathematics of money, cost composition, and project evaluation, including cost comparison. They will also learn to analyse projects for decision making, including risk assessment and replacement analysis. In addition, they will learn to use suitable criteria for project selection, and to conduct sensitivity analysis.
CR: Engineering 4102; the former MSTM 4020
4025 Applied Statistics (same as the former MSTM 4025) enables the student to use descriptive statistics to report data findings, to make statistical inferences using appropriate data analysis, and to use, and interpret the output from, statistical software.
CR: the former MSTM 4025
4030 Technology in the Human Context (same as the former MSTM 4030) examines technology in the historical context and technology in the modern era. Students will discuss human insights, innovation, the interactions between development and technology transfer, ethics and professionalism and how to develop a technology value system.
CR: the former MSTM 4030
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4040 Project Management for Technologists (same as the former MSTM 4040) introduces the student to the interdisciplinary field of project management. The course covers the interpersonal skills necessary to successfully lead or work effectively within a project team as well as providing an overview of certain planning and scheduling tools and techniques necessary for the planning and monitoring of projects.
CR: the former MSTM 4040
4050 Introduction to Quality Management (same as the former MSTM 4050) provides students with an understanding of the philosophy and concepts involved in the total quality approach to quality management. The course covers the various tools and techniques used in quality management as well as providing an overview of the role of management.
CR: the former MSTM 4050
4055 Marine Renewable Energy (same as the former MSTM 4055) provides students with an overview of MRE resources, introduces current and emerging technologies to exploit MRE resources, and places these technologies in context with environmental, political, and economic constraints.
CR: MSTM 4055
4060 Advanced Technical Communications (same as the former MSTM 4060) enhances the technical communication skills of students. The course content examines technical writing fundamentals; information gathering, analysis, and documentation; proposal preparation; technical document applications; technical report preparation; graphics preparation; and technical presentations. The course will provide students with the knowledge and skills necessary to develop proposals, reports, and presentations for technical projects.
CR: MSTM 4060
4070 Special Topics in Technology (same as the former MSTM 4070) provides the opportunity for students to maintain technical currency through a review of recent advances in technology and their application to particular
technical areas.
CR: MSTM 4070
4080 Maintenance Management provides an introduction to maintenance management systems, to devise maintenance strategies and to utilize risk management strategies using statistical analysis and computerized maintenance management systems.
4090 Introduction to Technology (same as the former MSTM 4090) provides a broad survey of practices critical to operating a technology-based business. Topics covered may include an introduction to technology management, historical developments in the management of technology, the functions of technology management, and select current topics that are relevant to operating technology-based businesses.
CR: MSTM 4090
4110 Health Care Management provides an introduction to health care management. Students will study leadership, change management, strategic planning, quality, and teamwork. They will also learn to analyze and examine health care related case studies. In addition, they will learn to research and analyze current health management issues which exist.
4400 Technological Assessment Project (same ass the former MSTM 4400) provides students with the opportunity to conduct an assessment and implementation plan of a technical project in their area of interest. Students will utilize the knowledge that they have obtained in the required courses and incorporate this knowledge into a final project paper.
CR: the former MSTM 410A/B, the former MSTM 4000, the former MSTM 4100, the former MSTM 4200, the former MSTM 4400 and the former Technology 4000
PR: one of TECH 4019 or the former MSTM 4019, one of TECH 4040 or the former MSTM 4040, one of TECH 4060 or the former MSTM 4060, and TECH 4025 or Statistics 1510 or 2500 or equivalent


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www.Grenfell.mun.ca
Vice-President
www.grenfell.mun.ca/vp
Keshen, J., B.A., Ph.D. York, M.A. Carleton; Professor, School of Arts and Social Science
Up-to-date personnel listings are available at www.grenfell.mun.ca/campus-services/Pages/Directory.aspx.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Grenfell Campus Description

www.grenfell.mun.ca
Grenfell Campus, Memorial University of Newfoundland, was established in September 1975, and originally was called the Western Regional College. In 1979 it was named Sir Wilfred Grenfell College, honouring the memory of the medical missionary who pioneered medicine in northern Newfoundland and along the coast of Labrador. In 2010, it was renamed Grenfell Campus, Memorial University of Newfoundland.
Four-year undergraduate degree programs in Arts, Business Administration, Environment and Sustainability, Fine Arts, Nursing, and Science may be completed at Grenfell Campus, as well as an accelerated program in Nursing. The Bachelor of Arts degree is available in English, Historical Studies, Humanities, Psychology, and Social/Cultural Studies, and the Bachelor of Arts (Honours) may be obtained in Psychology. The Bachelor of Business Administration is offered as general and honours degrees. The Bachelor of Science is offered in Computational Mathematics, Environmental Science, General Science, Physics, and Psychology and the Bachelor of Science (Honours) is offered in Environmental Science, and Psychology, and the University's four-year Bachelor of Nursing degree is offered in conjunction with the Western Regional School of Nursing in Corner Brook. Bachelor of Fine Arts degrees are conferred in Theatre and Visual Arts. These programs differ from those offered on the St. John's Campus and many are available only at the Grenfell Campus. Grenfell Campus also offers graduate programs in boreal ecosystems and agricultural science, environmental policy, and in visual arts. For information regarding graduate programs see the School of Graduate Studies at www.mun.ca/sgs.
Students at Grenfell Campus may also complete the first-year requirements of several programs offered at St. John's Campus including the requirements of the Engineering One Program. It is recommended that students meet with an academic advisor concerning course selection for specific programs.
Students have the option of completing distance and web-based credit courses offered by Memorial University of Newfoundland's Centre for Innovation in Teaching and Learning (CITL). As well, Grenfell's Office of Engagement offers a wide variety of non-credit courses to students, the Campus community, and the general public.
Grenfell's physical location affords the Campus a spectacular view of the city of Corner Brook and the scenic Bay of Islands. All Campus buildings are connected by a series of skywalks and tunnels. The Arts and Science Building houses administrative and academic units, a bookstore, an athletics and recreation wing, a student residence, the Grenfell Campus Student Union Student Centre and the Grenfell Campus Observatory and astronomical telescope. The Library and Computing Building includes Ferriss Hodgett Library, a computer lab and the largest lecture theatre on Campus. The Fine Arts Building contains facilities for visual arts and theatre students. It features a 160 seat theatre, dressing rooms, scenery, costume and properties workshops, as well as an actors' green room and a rehearsal hall. The Fine Arts Building also includes an art gallery, art storage vault, studios for drawing, painting, sculpture, multi-media and photography, darkrooms, and workshops for lithography, intaglio and serigraphy. The Forest Centre houses classroom, laboratory and research facilities for the Campus as well as the Atlantic Division of the Canadian Forest Service, Natural Resources Canada. Adjacent to the Forest Centre is a boreal ecosystem research facility, which supports research in agricultural, environmental and boreal sectors.
Additional information regarding the Grenfell Campus is available at www.grenfell.mun.ca.
Students must meet all regulations of Grenfell Campus in addition to those stated in the general regulations.
For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information concerning scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Statement of Academic Purpose

Grenfell Campus, as part of Memorial University of Newfoundland, is a four year undergraduate degree granting institution offering a liberal education in arts and science and a professional education in business, nursing, theatre and visual arts. In addition, the Campus continues to accommodate students who wish to complete their degrees at Memorial University of Newfoundland in St. John's or at universities elsewhere.
At Grenfell Campus a liberal education means a critical and open-minded pursuit of knowledge providing students with the intellectual tools to enable them to respond to a rapidly changing world. A liberal education marks the start of preparation for a career and it may lead to graduate work in a number of fields. In a broader sense it is intended to build a foundation for social, cultural and recreational interests that will help students move toward a meaningful personal and professional life. Academically, the aim of Grenfell Campus is to enable students to be open to new ways of thinking and to gain a lasting intellectual self-confidence so that they may have both the ability and the desire to be life-long learners.
At Grenfell Campus the goal of high quality education is reflected in the following commitments:

1. to teach students in a variety of challenging contexts and in general provide them with a personalized learning environment;
2. to maintain high academic standards;
3. to foster excellence in teaching, to encourage scholarship, research, performance and artistic endeavour, and to engage students, where appropriate, in these activities.

## 4 General Information

In addition to the information given below, further information regarding Grenfell Campus is available at www.grenfell.mun.ca.

### 4.1 Advice to Students on Planning a Program

www.grenfell.mun.ca/registrar
www.grenfell.mun.ca/undergraduate-studies
When planning the sequence of courses for a Major or Minor Program, or to ensure that a proposed degree program is possible within the constraints of course scheduling and prerequisites, students should seek advice from the Office of the Registrar or the appropriate Program Chair.

### 4.2 Student Unions

www.grenfell.mun.ca/current-students/Pages/student-union.aspx
The undergraduate Grenfell Campus Student Union (GCSU), Local 36, CFS, represents students' interests to the Campus administration and on a provincial and national level through the Canadian Federation of Students. The GCSU also promotes artistic, literary, educational, social, recreational, charitable, and sporting activities for the enhancement of the students of the Campus.
Information regarding the graduate student union is available at www.gsumun.ca/.
All full and part-time students pay student union fees and upon registration become members of the student unions.

### 4.3 Library

www.library.mun.ca/grenfell


Small branch, big collection! The Ferriss Hodgett Library is one of five libraries that make up the Memorial University of Newfoundland Libraries system. It provides local personalized service and a core collection of over 120,000 books, 200 print journal subscriptions, and other materials, combined with access to a much larger collection of print and online resources. Over 1,000,000 books and articles can be requested from the St. John's campus, and if it's not available through Memorial University of Newfoundland, can be obtained from other libraries worldwide.
Everyone is always welcome in the Library, but for those who like to research after hours or from the comfort of dorms or homes, remote access to the Library catalogue, over 20,000 e-books, 200 article databases, and 26,000 e-journals is available 24/7, making library research easier than ever. The Library also provides equipment loans to support emerging research needs such as eBook readers, digital voice recorders, portable DVD players, and more.
The Library has an Information Commons, with computers providing access to the Library's online resources (like e-journals and ebooks), Internet, email, MS Office, and other software. Students can bring their laptops into the Library and access all online services using the campus wireless network. There are a variety of study spaces, from group study rooms to individual study carrels and laptop chairs.
A full range of public services are offered including research assistance, tours, library instruction classes, and support for copyright enquiries.

### 4.4 Student Services

www.grenfell.mun.ca/current-students

### 4.4.1 Aboriginal Student Services

www.grenfell.mun.ca/aboriginal-students
Student Services provides a variety of services to Aboriginal students attending Grenfell Campus. The Student Affairs Officer-Aboriginal Affairs assists and/or refers students on matters related to admission requirements, adaptation to an academic/urban environment, and connections with Aboriginal communities on- and off-campus. Activities are organized on-campus to raise awareness about Aboriginal cultures and to develop opportunities for engaging Aboriginal students in life at Grenfell Campus. As well, the Aboriginal Student Centre is a designated culturally safe space for smudging and Ku/llk lighting. Further information may be obtained through the website at www.grenfell.mun.ca/aboriginal-students, by e-mail to studentservices@grenfell.mun.ca, or by telephone to (709) 637-6232.

### 4.4.2 Athletics

www.grenfell.mun.ca/athletics
Grenfell Campus competifive sports offerings include men's and women's basketball, women's volleyball, cross country skiing, and swimming. Further information may be obtained through the website at www.grenfell.mun.ca/athletics or by telephone to (709) 6377315.

### 4.4.3 Counselling and Psychological Services

www.grenfell.mun.ca/cps
The Campus has a full-time registered psychologist and two part-time professional counsellors in Counselling and Psychological Services, which is physically located within Health Services at Grenfell Campus. One of the counsellors works exclusively with Western Regional School of Nursing students and is located in Monaghan Hall. Counselling and Psychological Services provides a free and confidential service to students including personal, academic and career counselling. The services may be provided through individual appointments, group programming and/or on-line support. When necessary, counselling services can arrange referrals to other professionals in the community. In addition, psychoeducational assessments are available on a fee-for-service basis for currently registered students seeking academic accommodations. Further Information may be obtained through the web site at www.grenfell.mun.ca/cps or by telephone to (709) 637-7919.

### 4.4.4 Health Services <br> www.grenfell.mun.ca/health

Health Services provides students with access to a variety of allied health services including physiotherapy and massage. In addition, through a partnership with the Western Regional School of Nursing, Grenfell Campus offers a variety of sessions designed to promote healthy living. Further information may be obtained in-person in the Bennett Wing of the Arts and Science building (AS 243), through the website at www.grenfell.mun.ca/recreation, or by telephone to (709) 637-7919.

### 4.4.5 International Student Services

www.grenfell.mun.ca/international
International Student Services provides settlement and integration services to foreign students. New students must meet with the student programming coordinator (international) upon arrival for advice concerning their stay at the University and their compulsory health insurance program. Further information may be obtained through the website at www.grenfell.mun.ca/international or by telephone to (709) 639-6525.

### 4.4.6 The Learning Centre

www.grenfell.mun.ca/learning-centre
The Learning Centre, the Grenfell Campus is the academic support centre at Grenfell Campus. Staff assist students with writing, math, and study skills. Peer tutoring and supplemental instruction are available to students free of charge.
Students who require accommodations because of a disability should contact the Accessibility Centre \& Education Support (ACES) though the web at www.grenfell.mun.ca/disability-services or by telephone to (709) 637-6232.

### 4.4.7 Student Housing

www.grenfell.mun.ca/housing
Student Housing currently offers accommodation for 600 students in suite-style residences and chalet apartments. The suite-style residences are mainly for first-year students while the chalet-style apartments are mainly for students beyond first-year and families. In each apartment, four students share a living room, kitchen and one-and-a-half baths and each has their own room. Individual phones and Internet ports are provided.
Student Housing facilitates a variety of programs and activities to meet the diverse interests of residents and encourages students to get involved.
Further information may be obtained by telephone to (709) 637-6266, or by e-mail at resinfo@grenfell.mun.ca or through the website at www.grenfell.mun.ca/housing.

### 4.4.8 Wellness

www.grenfell.mun.ca/recreation
Grenfell Campus offers recreation and wellness activities that contribute to the well-being and personal and social development of students. The Campus has a double gymnasium. Students at Grenfell have the opportunity to participate in a variety of different recreation programs, such as: intramural sports, step aerobics, yoga, downhill skiing, and curling. Students also have access to a fitness centre (which includes cardio equipment, weights and squash courts), skating, hockey and a walking track. Students may purchase a recreation pass in order to participate in these activities. Further information may be obtained by telephone to (709) 637-6232.

## 5 Description of Programs

Students must meet all regulations of Grenfell Campus in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.

### 5.1 General Degrees

Grenfell Campus has three Schools; the School of Arts and Social Science, the School of Fine Arts, and the School of Science and the Environment. Grenfell Campus offers seven general degrees in sixteen program areas. For specific details on each degree refer to the appropriate Admission/Readmission Regulations for Grenfell Campus and Program Regulations - General and Honours Degrees. The School of Arts and Social Science also offers English as a Second Language non-degree programs.

### 5.1.1 Arts Degree

Bachelor of Arts degree programs are offered under the School of Arts and Social Science.
The School of Arts and Social Science offers the Bachelor of Arts Degree with majors in English Language and Literature, Historical Studies, Humanities, Psychology, and Social/Cultural Studies.
The Bachelor of Arts degree program is comprised of 120 credit hours, 40 courses, and may be completed on a full or part-time basis. Students will examine culture, thought, prehistory and history, human interactions, and the social and natural forces that constantly transform our society. Students gain critical-thinking, analytical and communication skills needed to succeed and adapt in a changing world through the study of a major and minor. Students must complete a minimum of 120 credit hours made up of Core Program Requirements, an approved concentration of courses known as a Major, an approved concentration of courses known as a Minor, and elective courses. A Minor is not required for Interdisciplinary programs. However, students in such programs may choose to complete a minor. A student may not use the same course to satisfy the requirements for both a Major and a Minor.
Majors are available in English Language and Literature, Historical Studies, Humanities, Psychology, and Social/Cultural Studies. The requirements for a Major can be fulfilled in one of two ways:

1. a minimum of 36 credit hours in a single discipline. Students choosing a single discipline major, with the exception of Bachelor of Science in Psychology, must complete one of the following: a minor or with the permission of the appropriate program chair(s), a second major. Actual credit hours required for specific disciplines will vary, or
2. a minimum of 72 credit hours in an interdisciplinary area.

All Majors require a minimum of 12 credit hours in 3000-level courses, 6 credit hours in 4000 -level courses and 3 credit hours in a 4000 level senior project. A candidate must follow the specific requirements for each major program as set forth in the Grenfell Campus
section of the University Calendar. Single discipline majors are available in following areas: English, Historical Studies, Humanities, and Psychology (B.A. and B.Sc.). Interdisciplinary majors are available in following areas: Social/Cultural Studies.
A Minor requires a minimum of 24 credit hours which must be completed in a single discipline or interdisciplinary area other than that of the Major. Minors are available in the following areas: Art History, Business, Canadian Studies, Classics, Economics, English, Environmental Science, Environmental and Sustainability, Folklore, French, Geography, Historical Studies, Humanities, Mathematics, Philosophy, Physics, Psychology, Religious Studies, Science, Social/Cultural Studies, Sociology, and Tourism Studies. A candidate must follow the requirements for the Minor program as set forth in the Grenfell Campus section of the University Calendar. As an alternative to a Minor, a second Major may be completed and students must meet all general and departmental or program regulations for both Majors.
Elective courses to make up the total of 120 credit hours, other than those required for the core program and Major/Minor requirements, may be chosen according to the following guidelines: Any courses in arts, social science, science and fine arts, and up to 15 credit hours in other subject areas.

### 5.1.2 Business Degree

The Bachelor of Business Administration (B.B.A.) is offered under the School of Arts and Social Science.
The Bachelor of Business Administration is comprised of 120 credit hours, 40 courses, and may be completed on a full or part-time basis. The program is designed to deliver a comprehensive foundation in the fundamental areas of business and decision making.
Articulation Agreements with the College of the North Atlantic are in place for students who have completed the two-year Business Administration (Accounting), the two-year Business Administration (Human Resource Management), the two-year Business Administration (Marketing), the three-year Business Management (Accounting), the three-year Business Management (Human Resource Management), or the three-year Business Management (Marketing) diploma programs and who wish to complete the Bachelor of Business Administration degree program at Grenfell Campus.
Articulation Agreements with the St. John's College Junior College, Belize are in place for students who have completed the two-year Business Administration (General), the two-year Business Administration (Accounting), the two-year Business Administration (Economics), or the two-year Business Administration (Tourism) associate degree programs and who wish to complete the Bachelor of Business Administration degree program at Grenfell Campus.
For specific admission and program requirements see Admission/Readmission Regulations for Programs Offered by the School of Arts and Social Science, Bachelor of Business Administration and Program Regulations - General and Honours Degree, the School of Arts and Social Science.

### 5.1.3 Education Degree

The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Office of Academic Programs, Faculty of Education.

### 5.1.4 Environment and Sustainability Degree

The Bachelor of Environment and Sustainability is offered under the School of Science and the Environment. The Bachelor of Environment and Sustainability is a four-year program comprised of 40 courses ( 120 credit hours) and may be completed on a full or part-time basis. The program aims to produce environmental specialists who have an understanding of ethics, as well as the many ecological, social, and economic factors that influence environmental decision making. The program offers students the opportunity to Major in either Resource Management or Environmental Studies. For specific admission and program requirements see Admission/ Readmission Regulations for Programs Offered by the School of Science and the Environment and Program Regulations General and Honours Degree, School of Science and the Environment.
Articulation Agreements with the College of the North Atlantic are in place for students who have completed the two-year Fish and Wildlife Technician or the two-year Forest Resources Technician Diploma and who wish to complete the Bachelor of Environment and Sustainability degree program at Grenfell Campus. For specific admission and program requirements see Admission/Readmission Regulations for Programs Offered by the School of Science and the Environment and Program Regulations - General and Honours Degree, School of Science and the Environment.

### 5.1.5 Fine Ârts Degree

The Bachelor of Fine Arts is offered under the School of Fine Arts.
The Bachelor of Fine Arts is available in Theatre or Visual Arts. For specific admission and program requirements see Admission/ Readmission Regulations for Programs Offered by the School of Fine Arts and Program Regulations - General and Honours Degree, School of Fine Arts.

### 5.1.5.1 Theatre

The Bachelor of Fine Arts (Theatre) is comprised of 120 credit hours, 36 courses and is normally completed on a full-time basis. This program is designed to educate and train the student in the history, theory and practice of the theatre arts.

### 5.1.5.2 Visual Arts

The Bachelor of Fine Arts (Visual Arts) is comprised of 120 credit hours, 40 courses and a non-credit health and safety course, and is normally completed on a full-time basis. This professional program is designed to educate and train students in the history, theory, and practice of the visual arts.

### 5.1.6 Nursing Degree

The Bachelor of Nursing (Collaborative) is a four-year program comprised of 130 credit hours and is completed on a full-time basis. The program is designed to prepare entry-level nurses who will function within a variety of health care settings. For specific admission and program requirements see Admission/Readmission Regulations for the Faculty of Nursing and Program Regulations, General Degree, Bachelor of Nursing (Collaborative). The program is completed at Grenfell Campus and the Western Regional School of Nursing.
The Bachelor of Nursing (Collaborative) Accelerated Option is designed for students with well-developed university-level study skills and prior completion of at least 60 credit hours in university level courses. This full-time Option is comprised of 106 credit hours taken over eight consecutive semesters. For specific admission and program requirements see Admission/Readmission Regulations for the Faculty of Nursing and Program Regulations, General Degree, Bachelor of Nursing (Collaborative) Accelerated Option The program is completed at Grenfell Campus and the Western Regional School of Nursing.

### 5.1.7 Science Degree

Bachelor of Science degree programs are offered under the School of Arts and Social Science and the School of Science and the Environment
The School of Science and the Environment offers the Bachelor of Science with Majors in Computational Mathematics, Environmental Science (Biology or Chemistry), General Science, and Physics general degrees. The School of Arts and Social Science offers the Bachelor of Science with Major in Psychology which follows the regulations of that School.
The Bachelor of Science is a four-year program comprised of 40 courses, 120 credit hours and may be completed on a full or part-time basis. Students must complete a minimum of 120 credit hours made up of Core Program Requirements, an approved concentration of courses known as a Major and elective courses. Students may also choose to complete an approved concentration of courses known as a Minor as part of the 120 credit hours.
For specific admission and program requirements see Admission/Readmission Regulations for Programs Offered by the School of Science and the Environment and Program Regulations - General and Honours Degree, School of Science and the Environment.

### 5.2 Honours Degrees

Programs are offered leading to the Honours Degrees of Bachelor of Arts, Bachelor of Business Administration, and Bachelor of Science. An Honours degree requires, over and above the requirement of the General degree, a concentration at an advanced level in an approved field, consisting of a subject or subjects of specialization and/or related subjects, and a high quality of work throughout the program. An Honours degree is of distinct advantage to students who plan advanced work or careers in their chosen fields and also to those who have a clear commitment to some special field of study. An Honours degree with first or second class standing is, in many cases, a prerequisite for admission to a graduate program. For specific details on each degree refer to the appropriate Program Regulations - General and Honours Degree, School of Science and the Environment

### 5.3 Non-Degree Programs

The School of Arts and Social Science offers the non-degree Intensive English Bridge Program at Grenfell (IEBP-G) and the Intensive English Program at Grenfell (IEP-G).

### 5.3.1 English as a Second Language

English as a Second Language programs are offered under the School of Arts and Social Science.
The English as a Second Language Office, affiliated with the School of Arts and Social Science, Grenfell Campus, offers year-round programs for adult students wishing to improve their English language skills for academic, professional or personal purposes. These programs include:

1. the Intensive English Bridge Program at Grenfell (IEBP-G);
2. twelve-week non-credit Intensive English Program at Grenfell (IEP-G) which are offered year-round on a semesterized basis;
3. tutoring and language development support for current Grenfell Campus, Memorial University of Newfoundland students in undergraduate and graduate degree programs; and
4. custom-designed language and culture programs for schools, universities, or businesses. These can be developed on contract and are either for general learning purposes or to suit the needs of specific disciplines or professions.
The full-time, non-credit Intensive English Program at Grenfell (IEP-G) is designed to improve English language skills for academic, professional and personal purposes, Reading, writing, speaking and listening skills are covered, and workshops on culture and social activities promoting integration with the local community also form part of the program. The program prepares the student for full-time university studies in English.
The full-time, non-credit and credit Intensive English Bridge Program at Grenfell (IEBP-G) is designed for applicants to Memorial University of Newfoundland who have been provisionally admitted as undergraduate students and who are students of advanced proficiency.
Information regarding the above programs and services is available from the Coordinator of English as a Second Language programs at Grenfell Campus, Memorial University of Newfoundland and online at www.grenfell.mun.ca/esl.

## 6 Admission/Readmission Regulations for Grenfell Campus

An applicant must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate), Categories of Applicants, Admission Criteria and OtherInformation. In addition to meeting these regulations, an applicant to certain programs offered by Grenfell Campus must meet the requirements as indicated below under the appropriate program and School.

### 6.1 Applications

The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.

### 6.2 Admission/Readmission Regulations for Programs Offered by the School of Arts and Social Science

1. A student may apply for admission into programs offered by the School of Arts and Social Science directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program.
2. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin.

Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
3. Transfer credit cannot be awarded for the following courses: English 4950; History 4950; Humanities 4950; Psychology 4950, 4951, 4959; Social/Cultural Studies 4000, 4100, 4950.

### 6.2.1 Bachelor of Arts Degrees

A student may apply for admission into the Bachelor of Arts program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application forms are submitted.

### 6.2.1.1 Direct Entry (for High School Students)

Students may apply for admission into the Bachelor of Arts program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University.

### 6.2.1.2 Transfers from Other Post-Secondary Institutions

1. Students who are transferring from other universities must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/ undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. Transfer credit cannot be awarded for the following courses: English 4950; History 4950; Humanities 4950; Psychology 4950, 4951, 4959; Social/Cultural Studies 4000, 4100, 4950.

### 6.2.2 Bachelor of Business Administration

### 6.2.2.1 Direct Entry (for High School Students)

Students may apply for admission into the Bachelor of Business Administration program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University.

### 6.2.2.2 Current Grenfell Campus Students

Current Grenfell Campus students should select the B.B.A. program on the Declare/Change Academic Program (Grenfell Campus) form available from the Office of the Registrar.

### 6.2.2.3 Transfers from Other Post-Secondary Institutions

1. Students who are transferring from accredited post-secondary institutions must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/ undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. Transfer credit cannot be awarded for the following courses: English 4950; History 4950; Humanities 4950; Psychology 4950, 4951, 4959; Social/Cultural Studies 4000, 4100, 4950.

### 6.2.2.4 Articulation Agreements for Bachelor of Business Administration

1. For Graduates of the Two-Year Business Administration (Accounting) Diploma Program Offered by the College of the North Atlantic A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration (Accounting) Diploma Program Offered by the College of the North Atlantic. A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
2. For Graduates of the Two-Year Business Administration (Human Resource Management) Diploma Program Offered by the College of the North Atlantic
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration (Human Resource Management) Diploma Program Offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
3. For Graduates of the Two-Year Business Administration (Marketing) Diploma Program Offered by the College of the North Atlantic A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the
online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration (Marketing) Diploma Program Offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
4. For Graduates of the Three-Year Business Management (Accounting) Diploma Program Offered by the College of the North Atlantic A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the three-Year Business Management (Accounting) Diploma Program Offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
5. For Graduates of the Three-Year Business Management (Human Resource Management) Diploma Program Offered by the College of the North Atlantic
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin.Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the three-year Business Management (Human Resource Management) Diploma Program Offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
6. For Graduates of the Three-Year Business Management (Marketing) Diploma Program Offered by the College of the North Atlantic

A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P WWWLogin.Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the three-year Business Management (Marketing) Diploma Program Offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
7. For Graduates of the Two-Year Business Administration (General) Associate Degree Program offered by the St. John's College Junior College, Belize
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration Associate Degree (General) offered by the St. John's College Junior College, Belize.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
8. For Graduates of the Two-Year Business Administration (Accounting) Associate Degree Program offered by the St. John's College Junior College, Belize
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun,ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration Associate Degree (Accounting) offered by the St. John's College Junior College, Belize.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
9. For Graduates of the Two-Year Business Administration (Economics) Associate Degree Program offered by the St. John's College Junior College, Belize
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration Associate Degree (Economics) offered by the St. John's College Junior College, Belize.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
10. For Graduates of the Two-Year Business Administration (Tourism) Associate Degree Program offered by the St. John's College Junior College, Belize
A student may apply for admission into the Bachelor of Business Administration program by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Business Administration Associate Degree (Tourism) offered by the St. John's College Junior College, Belize.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.

### 6.2.3 Bachelor of Education (Primary/Elementary) as a Second Degree

The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Office of Academic Programs, Faculty of Education.

### 6.2.4 Bachelor of Science with Major in Psychology

A student may apply for admission into the Bachelor of Science with Major in Psychology directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program.

### 6.2.4.1 Direct Entry (for High School Students)

Students may apply for admission into the Bachelor of Science with Major in Psychology program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus
should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University.

### 6.2.4.2 Transfers from Other Post-Secondary Institutions

1. Students who are transferring from accredited post-secondary institutions must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/ undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. Transfer credit cannot be awarded for the following courses: English 4950; History 4950; Humanities 4950; Psychology 4950, 4951, 4959; Social/Cultural Studies 4000, 4100, 4950.

### 6.2.5 English as a Second Language

A student may apply for admission to the Intensive English Program Grenfell (IEP-G) or the Intensive English Bridge Program at Grenfell (IEBP-G) program offered by the School of Arts and Social Science by submitting an application by email to esl@grenfell.mun.ca or in writing to the Coordinator, English as a Second Language Programs (Grenfell Campus), Memorial University of Newfoundland, Corner Brook, NL, A2H 6P9. Further information and applications for admission to these programs are available at www.grenfell.mun.ca/esl.
Grenfell Campus reserves the right to limit the number of spaces available in English as a Second Language programs.

### 6.2.5.1 Intensive English Program at Grenfell (IEP-G)

A student may apply for admission into the Intensive English Program Grenfell (IEP-G) program offered by the School of Arts and Social Science by submitting an application directly in writing to Coordinator, English as a Second Language Programs (Grenfell Campus), Memorial University of Newfoundland, Corner Brook, NL, A2H 6P9.
Applicants to the Intensive English Program must

1. be at least 18 years old;
2. hold a valid high school diploma; and
3. have an intermediate level of English proficiency, equivalent to International English Language Testing System (IELTS) 4.5 or higher, as determined by the English as a Second Language (ESL) Coordinator.
A student wishing to complete the Intensive English Program at Grenfell (IEP-G) in preparation for admission to Memorial University of Newfoundland as an undergraduate degree student may apply for this program at the same time as application for admission to undergraduate studies. Subject to General Academic Regulations (Undergraduate), Admission/Readmission to the University (Undergraduate), governing admission for undergraduate studies, and the regulations in place for admission to specific programs, a student may be provisionally admitted for studies at an undergraduate level in an upcoming term while currently enrolled in the Intensive English Program. The General Academic Regulations (Undergraduate), Admission/Readmission to the University (Undergraduate) should be reviewed carefully by students.

### 6.2.5.2 Intensive English Bridge Program at Grenfell (IEBP-G)

A student may apply for admission to Memorial University of Newfoundland using the University's General Application for Admission/ Readmission (Undergraduate).
A student for the Intensive English Bridge Program at Grenfell (IEBP-G) must have:

1. been provisionally accepted to undergraduate studies at Memorial University of Newfoundland;
2. achieved for IEBP-G Level 1: an average of Band 40 in the Canadian Academic English Language (CAEL) Assessment with a Writing sub-score of at least 40, a paper-based Test of English as a Foreign Language (TOEFL) score of 490, an iBT TOEFL score of 58 , with a minimum writing score of 16, or an International English Language Testing System (IELTS) score of 5.5 with no sub-score less than 5 and a minimum writing score of 5.5 or evidence showing equivalent proficiency as determined by the English as a Second Language (ESL) Coordinator; achieved for IEBP-G Level 2: an average of Band 50 in the CAEL with a Writing sub-score of at least 50, a paper-based TOEFL score of 530 , or an iBT TOEFL score of 70 , with a minimum writing score of 18 , or an IELTS score of 6.0 with no subscore less than 5.5 and a minimum writing score of 6.0 ; or evidence showing equivalent proficiency as determined by the ESL Coordinator; or
3. achieved a grade of " $B$ " or better with a satisfactory attendance level $(90 \%)$ if enrolled in the preceding level of the Intensive English program or Intensive English Bridge Program and " $C$ " in the concurrent credit course (if applicable) at the Grenfell Campus within the previous two semesters.
Final admission for provisionally admitted students will be subject to the regulations outlined under UNIVERSITY REGULATIONS, Admission/Readmission to the University (Undergraduate), English Language Proficiency Requirements.

### 6.3 Admission/Readmission Regulations for Programs Offered by the School of Fine Arts

1. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. A student may apply for admission into programs offered by the School of Fine Arts directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program. In addition to meeting the general admission requirements of the University,
applicants for the Bachelor of Fine Arts (Theatre) must undergo an audition/interview to the satisfaction of the Department. Enrollment in the Bachelor of Fine Arts (Theatre) is limited and selection is competitive. In addition to meeting the general admission requirements of the University, all applicants for the Bachelor of Fine Arts (Visual Arts) will be required to submit a portfolio of previous art work. The deadline for submission of applications to the Bachelor of Fine Arts (Theatre) is March 31st and the deadline for the Bachelor of Fine Arts (Visual Arts) is March 1st of the year in which entry is sought.
3. Transfer credit cannot be awarded for the following courses: Theatre 4001, 4010, 4020, 4060, 4070, 4080, 4090; Visual Arts 4800, 4801, 4950, 4951.

### 6.3.1 Bachelor of Fine Arts (Theatre)

1. Applicants must meet the general admission requirements of the University as outlined under UNIVERSITY REGULATIONS.
2. In addition to meeting the general admission requirements of the University, applicants for the Bachelor of Fine Arts (Theatre) must undergo an audition/interview to the satisfaction of the School. Enrollment in the Bachelor of Fine Arts (Theatre) is limited and selection is competitive.
3. The deadline for submission of Theatre application forms is March $31^{\text {st }}$ of the year in which admission is sought.
4. Transfer credit cannot be awarded for the following courses: Theatre 4001, 4010, 4020, 4060, 4070, 4080, 4090.

### 6.3.2 Bachelor of Fine Arts (Visual Arts)

1. Applicants must meet the general admission requirements of the University. outlined under UNIVERSITY REGULATIONS.
2. In addition to meeting the general admission requirements of the University, all applicants will be required to submit a portfolio of previous art work. Applicants must apply before March $1^{\text {st }}$ of the year in which entry is sought. Although it is assumed that applicants will have had no previous formal training in art, evidence of suitability for study in the visual arts is required. Instructions for the submission of portfolios will be provided by the School of Fine Arts upon request. Enrollment in the Bachelor of Fine Arts (Visual Arts) program is limited and selection is competitive.
3. Students who have voluntarily withdrawn from the Bachelor of Fine Arts (Visual Arts) program and wish to re-entermust re-apply by March 1st for the upcoming Fall semester, or by August 30th for the upcoming Winter semester.
4. Students who have been required to withdraw from the Bachelor of Fine Arts (Visual Arts) program and wish to re-enter must reapply in competition after a lapse of two semesters by March 1st for the upcoming academic year.
5. Students who have been required to withdraw twice from the Bachelor of Fine Arts (Visual Arts) program shall be ineligible for further admission to the Visual Arts Program.
6. Transfer credit cannot be awarded for the following courses: Visual Arts 4800, 4801, 4950, 4951.

### 6.4 Admission/Readmission Regulations for Programs Offered by the School of Science and the Environment

1. A student may apply for admission into programs offered by the School of Science and the Environment directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program.
2. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
3. Transfer credit cannot be awarded for the following courses. Environment and Sustainability 2200, 2201, 4950, 4960; Environmental Science 4000, 4950, 4951, 4959; Mathematics 4950; Physics 4100, 4880, 4950; Science 4000, 4950.

### 6.4.1 Bachelor of Environment and Sustainability

Students may apply for admission into the Bachelor of Environment and Sustainability program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program.

### 6.4.1.1 Direct Entry (for High School Students)

Students may apply for admission into the first year of the Bachelor of Environment and Sustainability program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University.

### 6.4.1.2 Transfers from Other Post-Secondary Institutions

1. Students who are transferring from accredited post-secondary institutions must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/ undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. Transfer credit cannot be awarded for the following courses: Environment and Sustainability 2200, 2201, 4950, 4960; Environmental

Science 4000, 4950, 4951, 4959; Mathematics 4950; Physics 4100, 4880, 4950; Science 4000, 4950.

### 6.4.1.3 Articulation Agreements for Bachelor of Environment and Sustainability

1. For Graduates of the Two-Year Fish and Wildlife Technician Diploma Program Offered by the College of the North Atlantic

A student may apply for admission into the Bachelor of Environment and Sustainability Program with Majors in Resource Management or Environmental Studies by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the two-year Fish and Wildlife Technician Diploma offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.
2. For Graduates of the Two-Year Forest Resources Technician Diploma Program Offered by the College of the North Atlantic

A student may apply for admission into the Bachelor of Environment and Sustainability program with majors in Resource Management or Environmental Studies by indicating the program of choice on the online application within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Students must be eligible for admission or readmission to the University in a category as defined in the Calendar section UNIVERSITY REGULATIONS and have been awarded the Two-Year Forest Resources Technician Diploma offered by the College of the North Atlantic.
A student in this category must apply under Transfers from Other Post-Secondary Institutions above.

### 6.4.2 Bachelor of Science

A student may apply for admission into the Bachelor of Science directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University. Grenfell Campus reserves the right to limit the number of spaces available in each Major and Minor program.

### 6.4.2.1 Direct Entry (for High School Students)

Students may apply for admission into the Bachelor of Science program directly from high school. The application for admission to programs offered by Grenfell Campus is submitted online. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/undergrad/apply. A complete application includes an application to the University and any other required supporting documentation. Application fees must be paid when the application is submitted. Direct admission from high school is subject to the applicant's final acceptance to the University.

### 6.4.2.2 Transfers from Other Post-Secondary Institutions

1. Students who are transferring from accredited post-secondary institutions must apply for admission to the University on or before the deadlines specified in the University Diary for the semester in which they intend to begin their program, to allow sufficient time for the evaluation of transfer credits. The application for admission or readmission to programs offered by Grenfell Campus is submitted online; current and returning applicants must apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Grenfell Campus should follow the application instructions at www.mun.ca/ undergrad/apply. A complete application includes an application to the University (for those who have not attended Grenfell Campus in the three preceding semesters) and any other required supporting documentation. Application fees must be paid when the application forms are submitted.
2. Transfer credit cannot be awarded for the following courses: Environment and Sustainability 2200, 2201, 4950, 4960; Environmental Science 4000, 4950, 4951, 4959, Mathematics 4950; Physics 4100, 4880, 4950; Science 4000, 4950.

### 6.5 Bachelor of Nursing (Collaborative) Degree

Admission/readmission regulations for the Bachelor of Nursing (Collaborative) degree program can be found at Admission/ Readmission Regulations for the Faculty of Nursing.

## 7 Program Regulations - General and Honours Degrees

### 7.1 School of Arts and Social Science Core Program Requirements

1. Students completing the Bachelor of Arts or Bachelor of Science degree programs at Grenfell Campus offered by the School of Arts and Social Sciences must complete the requirements as outlined below under Breadth of Knowledge Requirement, Literacy Requirement, and Quantitative Reasoning and Analysis Requirement.
2. Students completing the Bachelor of Environment and Sustainability or Bachelor of Science degree programs offered by the School of Science and the Environment must complete a core program as indicated under School of Science and the Environment Core Program Requirements.

### 7.1.1 Breadth of Knowledge Requirement

Six credit hours from each of the three groups identified below for a total of 18 credit hours. The courses chosen can be any courses within the disciplines identified. However, students are not permitted to use these courses to meet the Quantitative Reasoning and Analysis requirement nor the first-year English requirements.

### 7.1.1.1 Breadth of Knowledge Requirement - Group A

Art History, Classics, English, History, Humanities, Languages, Philosophy, Religious Studies, Theatre, Visual Arts

### 7.1.1.2 Breadth of Knowledge Requirement - Group B

Anthropology, Business, Economics, Education, Environment and Sustainability, Folklore, Gender Studies, Geography, Human Kinetics and Recreation, Political Science, Psychology, Sociology, Tourism Studies

### 7.1.1.3 Breadth of Knowledge Requirement - Group C

Biochemistry, Biology, Chemistry, Computer Science, Earth Sciences, Environmental Science, Mathematics, Physics, Science

### 7.1.2 Literacy Requirement

Thirty credit hours in Writing courses which must include 6 credit hours in first-year English. Up to 6 credit hours in languages other than English may be used to satisfy the literacy requirement. Courses in this group are identified with the designation W and are listed in Table 1 Designated Writing Courses (W).
Courses in this category must either be completed through on-campus offerings at Grenfell Campus or be demonstrated to be equivalent to Grenfell writing courses.

### 7.1.3 Quantitative Reasoning and Analysis Requirement

Six credit hours in Quantitative Reasoning and Analysis courses. Courses in this group are identified with the designation QRA and are listed in Table 2 Designated Quantitative Reasoning and Analysis Courses (QRA)

### 7.1.4 Designated Writing Courses (W)

Courses will be designated Writing courses by the Committee on Academic Programming. A Writing course is a course in which a minimum of 30 percent of the course grade involves a specific component consisting of written work on which students will receive feedback. For the purpose of this regulation, the final examination will not be counted as part of the evaluated Writing component.

Table 1 Designated Writing Courses (W)

| Anthropology: 2230, 2240, 2300, 2412, 2414, 2500, 3080, 3083, 3140, 3314, 3520, 3525, 4072, 4440 | Humanities: 1001, 1002, 2000, 2001, 2002, 2010, 3001, 3002, 3010, 3020, 3021, 4001, 4010, 4950 |
| :---: | :---: |
| Biology: 2040, 2041, 2122, 2600 | Mathematics: 2130 |
| Business: 2020, 3010, 3600, 4010, 4080, 5010, 5020, 5030, 5040, 5050 | Philosophy: 1002, 1005, 2020, 2030, 2040, 2100, 2130, 2140, 2201, 2215 2340, 2360, 3010, 3220, 3230, 3310, 3400, 3430, 3450, 3460, 3610, 4000, 4005 |
| Classics: 1100, 1120, 1121, 1200, 2010, 2015, 2020, 2035, 2040, 2055, 2701, 2800, 2801, 3010, 3020, 3110, 3111, 3130 | Political Science: 1010, 1020, 2200, 2600, 3351, 3631 |
| Economics: 3085 | Psychology: 4910, 4925, 4950, 4951, 4959 |
| English: All English courses listed with the Grenfell Campus English Program and English 2010 | Religious Studies: 1000, 2013, 2050, 2051, 2610, 2830, 3010, 3020, 3200, 3401, 3500, 3820, 3831,3840, 3880 |
| Environmental Science: 1000, 2370, 3131 | Social/Cultural Studies: 4000, 4100,4950 |
| Environment and Sustainability: 4201 | Sociology: 2100, 2120, 2230, 2240, 2610, 3140, 3150, 3160, 3290, 3314, 3395, 4072 |
| Folklore: 1000, 1050, 2100, 2230, 2300, 2401, 2500, 2600, 3130, 3200, 3300, 3606, 4440 | Theatre: 1000, 1001 |
| French: 2100, 2101, 2601, 2602, 3100, 3101 | Tourism: 2000,3240 |
| Gender Studies: 2001 | Visual Arts: 2700, 2701, 3620, 3700, 3701, 3702-3721, 3820, 4700-4729, 4730, 4731, 4740, 4741 |
| Geography: 2001, 2302 | University: 1010 |
| History: All History courses listed with the Grenfell Campus Historical Studies Program |  |

### 7.1.5 Designated Quantitative Reasoning and Analysis Courses (QRA)

Courses will be designated Quantitative Reasoning and Analysis by the Committee on Academic Programming. The Quantitative Reasoning and Analysis (QRA) Requirement is intended to help students develop a degree of appreciation of numerical, statistical and/ or symbolic modes of representation, as well as an appreciation of the analysis, interpretation and broader quantitative application of such representations.

Table 2 Designated Quantitative Reasoning and Analysis Courses (QRA)

| Biochemistry 1430 | Environment and Sustainability 2000, 2001, 3001, 3101, 4100 |
| :--- | :--- |
| Biology 2250,2600 | Geography 3222 |
| Business: $2100,2110,3100,3110,3120,3500,3510,4120$ | Mathematics (All courses) |
| Chemistry (All courses with the exception of Chemistry 1900) | Philosophy 2030 or the former 2210, 2031 or the former 2211 |
| Computer Science (All courses) | Physics (All courses) |
| Earth Sciences 2150 | Psychology 2925, 2950, 3950 |
| Economics 1010 (or the former 2010), 1020 (or the former 2020), <br> 3150 | Sociology 3040 |
| Environmental Science (All courses with the exception of: 1000, <br> $2360,2370,2371,3072$ and 4000) | Statistics (All courses) |

### 7.2 School of Science and the Environment Core Program Requirements

Students completing the Bachelor of Environment and Sustainability or Bachelor of Science degree programs offered by the School of Science and the Environment must complete at least 120 credit hours, including 24 credit hours as follows:

1. One of:
a. 6 credit hours in English courses;
b. 3 credit hours in English and 3 credit hours in another language;
c. 6 credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. 6 credit hours in Mathematics or Statistics courses;
3. 6 credit hours in courses chosen from: Biochemistry, Biology, Chemistry, Computer Science, Earth Sciences, Environmental Science, Ocean Sciences or Physics;
4. 6 credit hours in courses chosen from: Economics, Environment and Sustainability, Geography or Political Science.

The same course cannot be used to meet more than one of the requirements listed above.
Critical Reading and Writing (CRW) courses are regulated by the Faculty of Humanities and Social Sciences, St. John's Campus.
Eligible CRW courses are indicated under Faculty of Humanities and Social Sciences, Course Descriptions.

### 7.3 School of Arts and Social Science

www.grenfell.mun.ca/school-of-arts-and-social-science
The School of Arts and Social Science offers the Bachelor of Arts Degree with majors in English Language and Literature, Historical Studies, Humanities, Psychology, and Social/Cultural Studies. A Bachelor of Business Administration and a Bachelor of Science with Major in Psychology are also available. Minors are available in Business, Canadian Studies, Classics, English, Folklore, French, Historical Studies, Humanities, Philosophy, Psychology, Religious Studies, Social/Cultural Studies, Sociology, and Tourism Studies and are outlined under Table 19 Minor Programs Offered by the School of Arts and Social Science. Students may choose the minor from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. An Intensive English Program (IEP-G) and an Intensive English Bridge Program at Grenfell (IEBP-G) are also available.
Bachelor of Arts (Honours) in Psychology, Bachelor of Business Administration (Honours) and the Bachelor of Science (Honours) degree in Psychology are available.

### 7.3.1 Bachelor of Arts with Major in English Language and Literature

www.grenfell.mun.ca/english

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 1 Bachelor of Arts with Major in English Language and Literature
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major, an approved concentration of courses known as a Minor, and elective courses to make up the required total of 40 courses, 120 credit hours.
- A student may not use the same course to satisfy the requirements for both a Major and a Minor.
- As an alternative to a Minor, a second Major may be completed and students must meet all general and departmental or program regulations for both Majors
- A student may devise a Major/Minor of one's own choosing in close consultation with a faculty advisor and with approval of the appropriate dean(s). Such "open" programs must be approved by the School Committee on Student Academic Affairs.
- Any student enrolled in the Grenfell Campus Bachelor of Arts Degree with a Major in English who has completed the Bachelor of Fine Arts (Theatre) Degree at Grenfell Campus will be considered to have fulfilled the requirements for a Minor in Theatre.

Table 1 Bachelor of Arts with Major in English Language and Literature

| Required Courses |
| :--- |
| Courses as outlined under School of Arts and Social Science Core Program <br> Requirements, Breadth of Knowledge Requirement, Literacy Requirement, and <br> Quantitative Reasoning and Analysis Requirement <br> English 1000 and 1001 or equivalent <br> English 2005, 2006, 2007, 3205 or 3206, 3395, 4105 |

18 credit hours in one of the following concentrations. Within each concentration, there must be a minimum of 6 credit hours at the 3000 level and 6 credit hours at the 4000 level.

## Canadian Literature Concentration

English 2146, 4950 and 12 credit hours in Canadian Literature from the following selection: English 2145, 2155, 2156, 2905, 3145, 3147, 3148, 3149, 4307, 4825-35.

## Dramatic Literature Concentration

English 2350, 2351, 4950 and 9 credit hours in Dramatic Literature from the following selection: English 3021, 3171, 3181, 3205 or 3206 (whichever course has not been used to fulfil the requirements of the English Core), 3275, 4302, 4305, 4307, 4308, 4316, 4317, 4836-44.
Modern Literature Concentration
English 3215, 3216, 4950 and 9 credit hours in Modern Literature from the following selection: English 2215, 2242, 2243, 2244, 2245, 2705, 2805, 2870, 2905, 3192, 3245, 3275, 3810, 3905, 4245, 4246, 4302, 4305, 4308, 4861-4870, 4905.
Combined Concentration
A total of 18 credit hours from English Concentration Courses which must include:
At least 6 credit hours from one of three concentrations (Canadian, Dramatic, Modern) as specified below and an English 4950 project within the area chosen
Canadian Literature: 2146 and at least 3 additional credit hours in this concentration or
Dramatic Literature: 2350 or 2351 and at least 3 additional credit hours in this concentration or
Modern Literature: 3215 or 3216 and at least 3 additional credit hours in this concentration.
At least 3 credit hours from each of the other two concentrations.

Elective Courses
A minor comprised of 8 courses, 24 credit hours chosen from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. As an alternative to a Minor, a second Major may be completed

Elective courses to make up the total of 120 credit hours, other than those required for the School of Arts and Social Science Core Program Requirements and Major/ Minor requirements, may be chosen according to the following guidelines:
Any courses in arts, social science, science and fine arts and
Up to 15 credit hours in other subject areas.

### 7.3.2 Bachelor of Arts with Major in Historical Studies

www.grenfell.mun.ca/historical-studies

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 2 Bachelor of Arts with Major in Historical Studies.
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major, an approved concentration of courses known as a Minor, and elective courses to make up the required total of 40 courses, 120 credit hours.
- Applicable courses used to satisfy the Minor requirements may also be counted as Historical Studies credits.
- As an alternative to a Minor, a second Major may be completed and students must meet all general and departmental or program regulations for both Majors.
- A student may devise a Major/Minor of one's own choosing in close consultation with a faculty advisor and with approval of the appropriate dean(s). Such "open" programs must be approved by the School Committee on Student Academic Affairs.

Table 2 Bachelor of Arts with Major in Historical Studies
$\left.\begin{array}{|l|l|}\hline \text { Required Courses } & \text { Elective Courses } \\ \hline \begin{array}{c}\text { Courses as outlined under School of Arts and Social Science Core Program } \\ \text { Requirements, Breadth of Knowledge Requirement, Literacy } \\ \text { Requirement, and Quantitative Reasoning and Analysis Requirement }\end{array} & \begin{array}{c}\text { A minor comprised of 8 courses, 24 credit hours } \\ \text { chosen from Table 19 Minor Programs Offered } \\ \text { by the School of Arts and Social Science, or } \\ \text { from Table 5 Minor Program Offered by the }\end{array} \\ \text { School of Fine Arts, or from Table 10 Minor }\end{array}\right\}$
$\rightarrow$

### 7.3.3 Bachelor of Arts with Major in Humanities

www.grenfell.mun.ca/humanities

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 3 Bachelor of Arts with Major in Humanities.
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major, an approved concentration of courses known as a Minor, and elective courses to make up the required total of 40 courses, 120 credit hours.
- A student may not use the same course to satisfy the requirements for both a Major and a Minor.
- As an alternative to a Minor, a second Major may be completed and students must meet all general and departmental or program regulations for both Majors.
- A student may devise a Major/Minor of one's own choosing in close consultation with a faculty advisor and with approval of the appropriate dean(s). Such "open" programs must be approved by the School Committee on Student Academic Affairs.

Table 3 Bachelor of Arts with Major in Humanities

| Required Courses | Elective Courses |
| :---: | :---: |
| Courses as outlined under School of Arts and Social Science Core Program Requirements, Breadth of Knowledge Requirement, Literacy Requirement, and Quantitative Reasoning and Analysis Requirement | A minor comprised of 8 courses, 24 credit hours chosen from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. As an alternative to a Minor, a second Major may be completed. |
| The Major consists of 15 courses, 45 credit hours as follows: <br> 36 credit hours (Humanities 1001, 1002, 2000, 2001, 2002, 2010, 3001, 3002, 3010, 4001, 4010, 4950 either 3 credit hours in other Humanities courses plus 6 credit hours in a language other than English, or 9 credit hours in other Humanities courses | Elective courses to make up the total of 120 credit hours, other than those required for the School of Arts and Social Science Core Program <br> Requirements, and Major/Minor requirements, may be chosen according to the following guidelines: <br> Any courses in arts, social science, science and fine arts and Up to 15 credit hours in other subject areas. |

### 7.3.4 Bachelor of Arts with Major in Psychology

www.grenfell.mun.ca/psychology

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 4 Bachelor of Arts with Major in Psychology.
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major, an approved concentration of courses known as a Minor, and elective courses to make up the required total of 40 courses, 120 credit hours.
- A student may not use the same course to satisfy the requirements for both a Major and a Minor.
- As an alternative to a Minor, a second Major may be completed and students must meet all general and departmental or program regulations for both Majors.
- A student may devise a Major/Minor of one's own choosing in close consultation with a faculty advisor and with approval of the appropriate dean(s). Such "open"programs must be approved by the School Committee on Student Academic Affairs.
- Students completing this program cannot receive credit for Psychology 2920.

|  | Table 4 Bachelor of Arts with Major in Psychology |
| :--- | :--- |
| Required Courses | Elective Courses |
| Courses as outlined under School of Arts and Social Science <br> Core Program Requirements, Breadth of Knowledge <br> Requirement, Literacy Requirement, and Quantitative <br> Reasoning and Analysis Requirement | Elective courses to make up the total of 120 credit hours, other <br> than those required for the School of Arts and Social Science <br> Core Program Requirements and Major/Minor requirements, <br> may be chosen according to the following guidelines: <br> Any courses in arts, social science, science and fine arts and |
| Up to 15 credit hours in other subject areas. |  |

### 7.3.5 Bachelor of Arts with Major in Social/Cultural Studies

www.grenfell.mun.ca/social-cultural-studies

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 5 Bachelor of Arts with Major in Social/Cultural Studies.
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.

Table 5 Bachelor of Arts with Major in Social/Cultural Studies

| Required Courses | Elective Courses |
| :--- | :--- |
| Courses as outlined under School of Arts and Social Science Core Program <br> Requirements, Breadth of Knowledge Requirement, Literacy Requirement, and <br> Quantitative Reasoning and Analysis Requirement | Elective courses to make up the total of <br> 120 credit hours, other than those required <br> for the School of Arts and Social Science <br> Core Program Requirements and Major/ <br> Minor requirements, may be chosen <br> according to the following guidelines: |
|  | Any courses in arts, social science, science <br> and fine arts |
| Up to 15 credit hours in other subject |  |
| areas. |  |

### 7.3.6 Bachelor of Business Administration

## www.grenfell.mun.ca/business

- The Bachelor of Business Administration requires a total of 120 credit hours as outlined under Table 6 Bachelor of Business Administration and may be completed on a full or part-time basis. Students must achieve a grade point average of at least 2.5 and an average of at least $60 \%$ on those 120 credit hours.
- Students enrolled in the Bachelor of Business Administration program are not required to complete minor programs; however, students may choose to pursue a minor in other non-business academic units (where minor programs exist) with permission of that academic unit.
- Students are advised to refer to the requirements for the chosen Minor program as set forth in the University Calendar, and it is recommended that students seek academic advice when planning their program.

Table 6 Bachelor of Business Administration

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Year 1 | BUSN 1010 <br> BUSN 1020 <br> Economics 1010 (or the former 2010) <br> Economics 1020 (or the former 2020) <br> 6 credit hours in first-year English (students are strongly encouraged to take English 1110) <br> Mathematics 1000 or Mathematics 1052 | 9 credit hours se Electives below |
| Year 2 | BUSN 2020 <br> BUSN 2100 <br> BUSN 2110 <br> BUSN 2200 <br> BUSN 2250 <br> BUSN 2300 <br> BUSN 2310 <br> Statistics 2500 | 6 credit hours sele Electives below |
| Year 3 | BUSN 3010 <br> BUSN 3030 <br> BUSN 3300 <br> BUSN 3410 <br> BUSN 3500 <br> BUSN 3600 | 12 credit hours sele Electives below |
| Year 4 | BUSN 4010 <br> BUSN 4040 <br> BUSN 4070 | 21 credit hours sel Electives below |
| Electives <br> a minimum of 15 credit hours but no more than 24 credit hours shall be chosen from Table 7 Business Electives. These credit hours may be completed in any semester or year of the program. <br> a minimum of 24 credit hours but no more than 33 credit hours, other than those listed in Table 7 Business Electives, may be chosen to make up the total of 120 credit hours required for the degree. These credit hours shall be completed in any semester or year of the program. |  |  |

Table 7 Business Electives

| BUSN 2060 | BUSN 3800-3850 | BUSN 5010 | Economics 3150 |
| :--- | :--- | :--- | :--- |
| BUSN 2320 | BUSN 4020 | BUSN 5020 | Economics 3160 |
| BUSN 2500 | BUSN 4030 | BUSN 5030 | Economics 3550 |
| BUSN 3060 | BUSN 4060 | BUSN 5040 | Economics 4550 |
| BUSN 3100 | BUSN 4080 | BUSN 5050 | Environment and Sustainability 3001 |
| BUSN 3110 | BUSN 4120 | Computer Science 1600 | Environment and Sustainability 4201 |
| BUSN 3120 | BUSN 4130 | the former Computer Science <br> 1700 | Mathematics 2090 |
| BUSN 3150 | BUSN 4210 | Economics 2550 | Political Science 2200 |
| BUSN 3220 | BUSN 4220 | Economics 3000 | Political Science 2600 |
| BUSN 3230 | BUSN 4230 | Economics 3001 | Political Science 2800 |
| BUSN 3240 | BUSN 4310 | Economics 3010 | Political Science 3351 or the former 3550 |
| BUSN 3320 | BUSN 4510 | Economics 3011 | Political Science 3631 or the former 3731 |
| BUSN 3510 | BUSN 4610 | Economics 3030 | Sociology 2120 |
| BUSN 3610 | BUSN 4660 | Economics 3080 |  |
| BUSN 3620 | BUSN 4800-4850 | Economics 3085 |  |

### 7.3.6.1 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Business Administration (Accounting) diploma program offered by the College of the North Atlantic and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 8 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Diploma Program Offered by the College of the North Atlantic.

Table 8 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Diploma Program Offered by the College of the North Atlantic

| Diploma Program Offered by the College of the North Atlantic |  |  |
| :--- | :--- | :--- |
| Term | Required Courses | Elective Courses |
| Year 1 | BUSN 2300 | 9 credit hours selected from <br> BUSN 2310 <br> BUSN 3500 <br> BUSN 3600 <br> Economics 1020 (or the former 2020) <br> 3 credit hours in first-year English (students are strongly <br> encouraged to take English 1110) <br> Mathematics 1000 or Mathematics 1052 |
| Year 2 | BUSN 3010 <br> BUSN 3410 <br> BUSN 4010 |  |

## Electives

9 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program
15 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.6.2 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Human Resource Management) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Business Administration (Human Resource Management) diploma program offered by College of the North Atlantic and who are entering Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis
- Students will be required to complete an additional 60 credit hours forthe Grenfell Campus Bachelor of Business Administration program as outlined under Table 9 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Human Resource Management) Diploma Program Offered by the College of the North Atlantic.

Table 9 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Human Resource Management) Diploma Program Offered by the College of the North Atlantic

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Year 1 | BUSN 2110 <br> BUSN 2310 <br> BUSN 3500 <br> BUSN 3600 <br> Economics 1020 (or the former 2020) <br> 3 credit hours in first-year English (students are strongly <br> encouraged to take English 1110) <br> Mathematics 1000 or Mathematics 1052 | Electives below |
| Year 2 | BUSN 3010 <br> BUSN 3410 <br> BUSN 4010 <br> BUSN 4040 <br> BUSN 4070 | 15 credit hours selected from <br> Electives below |

## Electives

9 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program 15 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.6.3 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Marketing) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Business Administration (Marketing) diploma program offered by the College of the North Atlantic and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 10 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Marketing) Diploma Program Offered by the College of the North Atlantic.

Table 10 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Marketing) Diploma Program Offered by the College of the North Atlantic

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Year 1 | BUSN 2110 <br> BUSN 2300 <br> BUSN 2310 <br> BUSN 3500 <br> BUSN 3600 <br> 3 credit hours in first-year English <br> (students are strongly encouraged to <br> take English 1110) <br> Mathematics 1000 or Mathematics 1052 | 9 credit hours selected from Electives <br> below |
| Year 2 | BUSN 3010 <br> BUSN 3410 <br> BUSN 4010 <br> BUSN 4040 <br> BUSN 4070 | 15 credit hours selected from Electives |

7.3.6.4 Bachelor of Business Administration for Graduates of the Two-Year Búsiness Administration (General) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Business Administration (General) diploma program offered by the College of the North Atlantic and who are seeking entry into the Bachelor of Business Administration program must have a minimum of $65 \%$ in the diploma and will be required to complete a minimum of 60 additional credit hours towards the 120 credit Grenfell Campus Bachelor of Business Administration program. The remaining 60 credit hours and specific course requirements will be determined on an individual basis at the time of admission. The program may be completed on a full or part-time basis.


### 7.3.6.5 Articulation Agreement - Bachelor of Business Administration for Graduates of the Three-Year Business Management (Accounting) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the three-year Business Management (Accounting) diploma program offered by the College of the North Atlantic and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 75 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 45 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 11 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Accounting) Diploma Program Offered by the College of the North Atlantic.

Table 11 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Accounting) Diploma Program Offered by the College of the North Atlantic

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Fall | BUSN 3500 <br> BUSN 4010 <br> 3 credit hours in first-year English <br> Mathematics 1000 or Mathematics 1052 | 3 credit hours selected from Electives <br> below |
| Winter | BUSN 4040 | 12 credit hours selected from Electives <br> below |
| Spring | BUSN 2310 <br> BUSN 3010 <br> BUSN 4070 | 6 credit hours selected from Electives <br> below |
| Electives <br> 9 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program <br> 12 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the <br> program |  |  |

### 7.3.6.6 Articulation Agreement - Bachelor of Business Administration for Graduates of the Three-Year Business Management (Human Resource Management) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the three-year Business Management (Human Resource Management) diploma program offered by the College of the North Atlantic and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 75 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 45 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 12 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Human Resource Management) Diploma Program Offered by the College of the North Atlantic.

Table 12 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Human Resource Management) Diploma Program Offered by the College of the North Atlantic

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Fall | BUSN 3500 <br> BUSN 4010 <br> Economics 1020 (or the former 2020) <br> 3 credit hours in first-year English <br> Mathematics 1000 or Mathematics 1052 |  |
| Winter | BUSN 2110 <br> BUSN 3410 <br> BUSN 4040 | 6 credit hours selected from Electives below |
| Spring | BUSN 2310 <br> BUSN 3010 <br> BUSN 4070 | 6 credit hours selected from Electives below |

12 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.6.7 Articulation Agreement - Bachelor of Business Administration for Graduates of the Three-Year Business Management (Marketing) Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the three-year Business Management (Marketing) diploma program offered by the College of the North Atlantic and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $65 \%$ in the diploma and will be awarded 75 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 45 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 13 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Marketing) Diploma Program Offered by the College of the North Atlantic.

Table 13 Bachelor of Business Administration for Graduates of the Three-Year Business Management (Marketing) Diploma Program Offered by the College of the North Atlantic

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Fall | BUSN 3500 <br> BUSN 4010 <br> 3 credithours in first-year English <br> Mathematics 1000 or Mathematics 1052 | 3 credit hours selected from Electives <br> below |
| Winter | BUSN 2110 <br> BUSN 3410 <br> BUSN 4040 | 6 credit hours selected from Electives <br> below |
| Spring | BUSN 2310 <br> BUSN 3010 <br> BUSN 4070 | 6 credit hours selected from Electives <br> below |

## Electives

3 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program 12 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.6.8 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (General) Associate Degree Program Offered by the St. John's College Junior College, Belize

- Students who have graduated from the Two-Year Business Administration (General) Associate Degree Program offered by the St. John's College Junior College, Belize and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $75 \%$ in the Associate Degree program and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 14 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (General) Associate Degree Program Offered by the St. John's College Junior College, Belize.

Table 14 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (General) Associate Degree Program Offered by the St. John's College Junior College, Belize


### 7.3.6.9 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Associate Degree Program Offered by the St. John's College Junior College, Belize

- Students who have graduated from the Two-Year Business Administration (Accounting) Associate Degree Program offered by the St. John's College Junior College, Belize and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $75 \%$ in the Associate Degree program and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 15 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Associate Degree Program Offered by the St. John's College Junior College, Belize.
Table 15 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Accounting) Associate Degree Program offered by the St. John's College Junior College, Belize

| Term $\quad$ - | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Year 1 | BUSN 1020 <br> BUSN 2020 <br> BUSN 2110 <br> BUSN 2200 <br> BUSN 2300 <br> BUSN 2310 <br> Mathematics 1052 or 1000 | 9 credit hours selected from Electives below |
| Year 2 | BUSN 3010 <br> BUSN 3300 <br> BUSN 3410 <br> BUSN 4010 <br> BUSN 4040 <br> BUSN 4070 | 12 credit hours selected from Electives below |

Electives
9 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program
12 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.6.10 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Economics) Associate Degree Program Offered by the St. John's College Junior College, Belize

- Students who have graduated from the Two-Year Business Administration (Economics) Associate Degree Program offered by the St. John's College Junior College, Belize and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $75 \%$ in the Associate Degree program and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 16 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Economics) Associate Degree Program Offered by the St. John's College Junior College, Belize.

Table 16 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Economics) Associate Degree Program Offered by the St. John's College Junior College, Belize

7.3.6.11 Articulation Agreement - Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Tourism) Associate Degree Program Offered by the St. John's College Junior College, Belize

- Students who have graduated from the Two-Year Business Administration (Tourism) Associate Degree Program offered by the St. John's College Junior College, Belize and who are entering the Grenfell Campus Bachelor of Business Administration program must have a minimum average of $75 \%$ in the Associate Degree program and will be awarded 60 credit hours of transfer credit applicable to the 120 credit hour degree program. The program may be completed on a full or part-time basis.
- Students will be required to complete an additional 60 credit hours for the Grenfell Campus Bachelor of Business Administration program as outlined under Table 17 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Tourism) Associate Degree Program offered by the St. John's College Junior College, Belize.

Table 17 Bachelor of Business Administration for Graduates of the Two-Year Business Administration (Tourism) Associate Degree Program Offered by the St. John's College Junior College, Belize

| Term | Required Courses | Elective Courses |
| :--- | :--- | :--- |
| Year 1 | BUSN 1020 |  |
| BUSN 2020 |  |  |
| BUSN 2110 |  |  |
| BUSN 2200 |  |  |
| BUSN 2300 |  |  |
| BUSN 2310 |  |  |
| Mathematics 1052 or 1000 | 6 credit hours selected from Electives <br> below |  |
| Year 2 | BUSN 3010 <br> BUSN 3300 <br> BUSN 3410 <br> BUSN 3500 <br> BUSN 3600 <br> BUSN 4010 <br> BUSN 4040 <br> BUSN 4070 |  |

## Electives

3 credit hours chosen from Table 7 Business Electives which may be completed in any semester or year of the program 12 credit hours other than those listed in Table 7 Business Electives which may be completed in any semester or year of the program

### 7.3.7 Bachelor of Education (Primary/Elementary) as a Second Degree

www.grenfell.mun.ca/education
The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Office of Academic Programs, Faculty of Education.

### 7.3.8 Bachelor of Science with Major in Psychology

www.grenfell.mun.ca/psychology

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 18 Bachelor of Science with Major in Psychology.
- A student must complete Core Program Requirements as outlined under School of Arts and Social Science Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.
- Students completing this program cannot receive credit for Psychology 2920.

Table 18 Bachelor of Science with Major in Psychology

| Required Courses | Elective Courses |
| :---: | :---: |
| Courses as outlined under School of Arts and Social Science Core Program Requirements, Breadth of Knowledge Requirement, Literacy Requirement, and Quantitative Reasoning and Analysis Requirement | Elective courses to make up the total of 120 credit hours, other than those required for the School of Arts and Social Science Core Program Requirements and Major/Minor requirements, may be chosen according to the following guidelines: <br> Any courses in arts, social science, science and fine arts and Up to 15 credit hours in other subject areas. |
| 45 credit hours in Psychology as follows: <br> Psychology 1000, 1001, 2925, 2950, 3950, 4910, 4925, and one of 4950 or 4951 <br> At least 12 credit hours from: Psychology 2025, 2125, 2225, 2425, 2625, 2825 <br> At least 9 credit hours chosen from the following Contemporary Issues courses: Psychology 3025, 3040, 3125, 3126, 3225, $3226,3325,3425,3525,3625,3626,3627,3628,3725,3825$ <br> 36 credit hours as follows: <br> 6 credit hours in Mathematics, which must include Mathematics 1000 <br> Biology 1001 and 1002 <br> Chemistry 1200 and 1001 or Physics 1020 (or 1050) and 1021 (or 1051) <br> 9 credit hours at the 2000 level or above (two courses must be laboratory courses) in one of the following subjects: Biochemistry, Biology, Chemistry, Earth Science, Environmental Science, Physics <br> 9 additional credit hours chosen in any combination from the following subjects: Biochemistry, Biology, Chemistry, Computer Science, Earth Science, Environmental Science, Mathematics, Physics, Statistics | If a student decides to complete a minor, it must be comprised of 8 courses, 24 credit hours chosen from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. |

### 7.3.9 Intensive English Program at Grenfell (IEP-G)

www.grenfell.mun.ca/esl

- The 12 week, full-time, non-credit program may be offered at the intermediate level in each of the Fall, Winter, and Spring semesters.
- Full participation is an essential part of the language learning process in this program. For this reason, regular attendance is required. No more than $10 \%$ of instructional days may be missed without documented reasons that are acceptable to the Coordinator of English as a Second Language Programs. Students who fail to meet the minimum attendance requirements may not be permitted to re-enroll in the IEP in the following semester.
- Evaluation of students may include, but not be limited to, any or all of the following: projects, assignments, quizzes, oral presentations, and class participation.


### 7.3.9.1 Program of Study

1. The IEP-G may be offered at the intermediate level in each of the Fall, Winter, and Spring terms.
2. A student admitted to the IEP-G must register for the course English as a Second Language 013F.

### 7.3.10 Intensive English Bridge Program at Grenfell (IEBP-G)

www.grenfell.mun.ca/esl

- The program is offered at two levels, IEBP-G Level 1 and IEBP-G Level 2 and requires fifteen to twenty hours of classroom language instruction in reading, writing, speaking, grammar, vocabulary and listening. The emphasis is on English for academic purposes.
- A student in this program may register concurrently for one undergraduate credit course at IEBP-G Level 1 or two undergraduate credit courses at IEBP-G Level 2, in consultation with the Coordinator of English as a Second Language programs and with the approval of the academic unit. The number of semesters of intensive English study required to achieve a student's desired level of proficiency will vary according to the student's initial proficiency level and individual progress rate.
- The Intensive English Bridge Program is intended for applicants to Memorial University of Newfoundland who have been provisionally admitted as undergraduate students, and who are students of high intermediate or advanced proficiency who meet the criteria outlined in Admission.
- Final admission for provisionally admitted students will be subject to the regulations governing English language proficiency requirements for admission/readmission to the University as described in the University Calendar under UNIVERSITY REGULATIONS, English Language Proficiency Requirements.


### 7.3.10.1 Program of Study

1. A student admitted to the Intensive English Bridge Program must register for the course English as a Second Language 014F (level 1) or 015F (level 2).
2. A student in this program may normally register for no more than one credit course at IEBP-G Level 1 and no more than two credit courses at IEBP-G Level 2, chosen in consultation with the Coordinator of the English as a Second Language Program, and with approval of the academic unit.
3. A student may register in each level of the Intensive English Bridge Program for a maximum of two semesters.
4. Full participation is an essential part of the language learning process in this Program. For this reason, regular attendance is required. No more than $10 \%$ of instructional days may be missed without documented reasons that are acceptable to the Coordinator of English as a Second Language Programs. A student who fails to meet the minimum attendance requirements may not be permitted to re-enroll in the IEBP-G in the following semester.

### 7.3.11 Minor Programs Offered by the School of Arts and Social Science

www.grenfell.mun.ca/minor
The School of Arts and Social Science offers minors comprised of 8 courses, 24 credit hours as outlined under Table 19 Minor Programs Offered by the School of Arts and Social Science. In addition to the minors below, students for the Bachelor of Arts degree may complete a minor offered by the School of Fine Arts or the School of Science and the Environment.

Table 19 Minor Programs Offered by the School of Arts and Social Science

## Business Minor

Business 1010, 1020
9 credit hours in Business courses from the Grenfell Campus offerings at the 2000-level
9 credit hours in Business courses from the Grenfell Campus offerings at the 3000-level or above

## Canadian Studies Minor

15 credit hours chosen from at least four different disciplines: English 2146, English 2156
French 1502, French 2601, French 2602
History 2200, History 2210
Political Science 1010, the former Political Science 2710, the former Political Science 2711, Political Science 2800
Sociology/Anthropology 2240
9 additional credit hours in courses from at least two different disciplines:
Art History 3710, Art History 3711
English 3145, English 3147, English 3148, English 3149, English 4307, English 4825-35
Folklore 4300
History 2120, History 3520/Anthropology 3520/Archaeology 3520, History 3525/Anthropology 3525/Archaeology 3525, History 4254

Political Science 3631 or the former 3731
Sociology 3395
Classics Minor
Classics 1100 and 1200
Classics 2035 and 2040
3 credit hours at the 3000 level 9 additional credit hours in Classics

## English Minor

6 credit hours at 1000 level in English
6 credit hours from English 2005, 2006 and 2007
3 credit hours from English 3205 or 3206


## Humanities Minor

Humanities 1001 and 1002
6 credit hours from Humanities 2001, 2002 or 2010
12 credit hours from Humanities 3001, 3002, 3010, 3020, 3021, 4001,4010 ; one of 3100-3109; one of 4020-4029

## 9 additional credit hours in English electives; at least 3 credit

 hours must be at the 3000 or 4000 -leve
## Philosophy Minor

Philosophy 1002 or the former 1200, 1005 or the former 1600 2030 or the former 2210, 2100 or the former 2551, 2130 or the former 2561
9 additional credit hours in Philosophy, of which at least 3 credit hours must be at the 3000 or 4000 -level

Psychology Minor
Psychology 1000, 1001
18 credit hours in Psychology at the 2000 level or above

## Religious Studies Minor

24 credit hours in Religious Studies with no more than 6 credit hours at 1000 level and at least 9 credit hours at 3000 level or above.


No more than 6 credit hours at the 1000 level and no more than 6 transfer credits may be used to fulfill the minimum requirement of the minor in French.
French 2100 and 2101
French 3100 or French 3101
15 additional credit hours in French

## Historical Studies Minor

History 1100 and 1101
History 3840
3 credit hours at 3000 level in History
3 credit hours at 4000 level in History
additional 9 credit hours in History

## Social/Cultural Studies Mino

Anthropology 1031, Folklore 1000, Sociology 1000
Anthropology 2410 or Sociology 3150
Folklore 2100 or Sociology 3040
3 additional credit hours in each of Anthropology, Folklore, and Sociology

## Sociology Minor

Sociology 1000, 3040, 3150
15 credit hours in Sociology; at least 6 credit hours must be at the 3000 or 4000 level

## Tourism Studies Minor

Business 1020
Tourism 1000, 3240, 4902
6 credit hours in Tourism Studies beyond the 1000-level
6 credit hours chosen from Environment and Sustainability 2200 or 2201, Philosophy 2130 or the former Philosophy 2561, Religious Studies 3880

Students for the Bachelor of Arts, Bachelor of Business Administration, and Bachelor of Science degrees offered by the School of Arts and Social Science may complete a minor offered by the School of Arts and Social Science, the School of Fine Arts, or the School of Science and the Environment. See Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment

### 7.4 School of Fine Arts

www.grenfell.mun.ca/school-of-fine-arts
The School of Fine Arts offers Bachelor of Fine Arts degrees in Theatre and in Visual Arts. The Minor Program is available in Art History.

### 7.4.1 Bachelor of Fine Arts (Theatre)

www.grenfell.mun.ca/theatre

- The 120 credit hour, 36 course program may be completed on a full-time basis as set out under Table 1 Bachelor of Fine Arts (Theatre). The course structure for the Bachelor of Fine Arts (Theatre) is outlined under Table 2 Suggested Program of Study for the Bachelor of Fine Arts in Theatre.
- The program is designed to educate and train the student in the history, theory and practice of the theatre arts. The degree provides an undergraduate training, delivered by theatre professionals, that will prepare students to enter a professional graduate school of theatre, theatre conservatory or an apprenticeship in the theatre profession. The degree also provides a broad liberal arts education with a strong component of dramatic literature, enabling the graduate to pursue a variety of careers outside the theatre profession.
- In recognition of the relative isolation of the Grenfell Campus and the need for students of the performing arts to be exposed to examples of excellence in their field of study, provision will be made for students in their senior years to visit major theatre centres outside the province (e.g. the Harlow Campus will be utilized for studies in London and Stratford).
- Where circumstances warrant any prerequisite(s) for Theatre courses may be waived by the Program Chair.
- Students in their first year will not be allowed to participate in theatre productions. Exceptions will be made only with the permission of the Dean of the School of Fine Arts, and permission will be given only where a student demonstrates satisfactory performance. Where circumstances warrant, a student in second or third year may be given the opportunity for advanced responsibilities in production with the permission of the Program Chair. Permission will be given only where a student demonstrates above average academic performance as well as exceptional theatrical ability.
- Productions will constitute the designated number of rehearsal hours as described below. However, the final week of rehearsals (technical rehearsals) will include ten hour days on Saturday and Sunday. All performances will take place in the evenings with the possible exceptions of occasional matinees.

Table 1 Bachelor of Fine Arts (Theatre)


Table 2 Suggested Program of Study for the Bachelor of Fine Arts in Theatre


### 7.4.2 Bachelor of Fine Arts (Visual Arts)

## www.grenfell.mun.ca/visual-arts

- The 120 credit hour, 40 course program and a non-credit health and safety course, may be completed on a full-time basis as set out under Table 3 Bachelor of Fine Arts (Visual Arts) and Table 4 Suggested Program of Study for the Bachelor of Fine Arts (Visual Arts).
- The Bachelor of Fine Arts (Visual Arts) degree program is a professional program designed to educate and train students in the history, theory and practice of the Visual Arts. Courses are offered in Computers and Art, Drawing, New Media, Painting, Sculpture, Printmaking, Photography, Textile and Fibre Art, Time-Based Art, and Art History/Visual Culture. The curriculum is devised with the aim of producing well-rounded generalists with a solid grounding in all aspects of the Visual Arts. It illustrates the philosophy that artistic freedom and creative expression require both technical skill and intellectual vision, acquired through a disciplined application of effort and a critical awareness of artistic issues, past and present.
- In addition to Studio and Art History/Visual Culture courses, students will take a number of appropriate academic courses from disciplines other than Visual Arts. It is intended that academic courses be chosen which will enhance the Bachelor of Fine Arts (Visual Arts) program. The first year of the program consists of an in-depth exploration of a wide range of media and an introductory health and safety studio component. This is in preparation for continued study in a given discipline or, alternatively, exploring new disciplines in the second year. Intermediate studio courses in the third year emphasize the production of self-directed bodies of work in extended practices. In the fourth year, the senior studio seminar course includes professional practices. The 4950/4951 studio courses are conducted as tutorials, in which, students will work independently on the research and creation of independent bodies of work and confer regularly with instructors. Each year of the program will include Art History/Visual Culture courses as well as academic electives.
- It is recognized that students in the Bachelor of Fine Arts (Visual Arts) program must have occasional opportunities to view important works of art first-hand. Arrangements will therefore be made where possible for students to visit major art centres.
- The Bachelor of Fine Arts (Visual Arts) program is rigorous and demanding and it is assumed that students will normally be enrolled for full-time study. Students who withdraw from a course may put their program in jeopardy or be unable to complete the degree in the normally allotted time. Where circumstances warrant, any prerequisite(s) or co-requisite(s) for Visual Arts courses may be waived by the Program Chair. For further information on waiver or regulations refer to UNIVERSITY REGULATIONS, General Academic Regulations (Undergraduate) - Appeal of Decisions.
- Studio courses are offered in the following subjects: Computers and Art, Drawing, New Media, Painting, Sculpture, Printmaking, Photography, Textile and Fibre Art, and Time-Based Art. Courses in a studio subject consist of four hours of practical work in a studio class each week. Course components will require that considerable additional studio work be done outside scheduled class time. Students will supply their own art materials. Some courses may not be offered every year. Courses with a planned rotation are indicated in the University Calendar under Course Descriptions. Please consult with the Fine Arts Division prior to registration to confirm course offerings.
- One work of art done during the fourth year may be selected by the Visual Arts Program, in consultation with the student, and retained for the permanent collection of the Campus.

Table 3 Bachelor of Fine Arts (Visual Arts)

| Required Courses | Elective Courses |
| :--- | :--- |
| 6 credit hours in English courses | 18 credit hours in academic |
| Visual Arts 2700 and 2701 and an additional 18 credit hours in Art History /Visual Culture | elective courses chosen from <br> 18 credit hours in Studio Courses at the 1000 level <br> Visciplines other than Visual <br> 24 credit hours in Studio Courses at the 2000 level <br> 15 credit hours in Studio Courses at the 3000 level <br> 3 addditional credit hours in Studio Courses at 2000 or 3000 or 4000 level |
| Visual Arts 4800 and 4801 |  |
| Visual Arts 4950 and 4951 |  |

Table 4 Suggested Program of Study for the Bachelor of Fine Arts (Visual Arts)

| Year 1 | Year 2 |
| :--- | :--- |
| 18 credit hours in 1000 level Studio Courses | 18 credit hours in 2000 level Studio Courses |
| Visual Arts 1911 | 6 credit hours in Art History/Visual Culture Courses |
| 6 credit hours in Art History Survey I, II (Visual Arts 2700 and | 6 credit hours in Academic Electives |
| 2701 ) |  |
| 6 credit hours in English |  |
| Year 3 | Year 4 |
| 12 credit hours in 3000 level Studio Courses | 6 credit hours in Senior Seminar for Studio and Professional |
| 6 credit hours in 2000 or 3000 level Studio Courses | Practices I, II (4800, 4801) |
| 6 credit hours in Art History/Visual Culture Courses | 6 credit hours in Independent Senior Studio I, II (4950/4951) |
| 6 credit hours in Academic Electives | 6 credit hours in 2000 or 3000 or 4000 level Studio Courses |
|  | 6 credit hours in Art History/Visual Culture Courses |
|  | 6 credit hours in Academic Electives |

### 7.4.3 Minor Program Offered by the School of Fine Arts <br> www.grenfell.mun.ca/minor

The Art History/Visual Culture Courses Minor Program is applicable to all programs offered at Grenfell Campus except for the Bachelor of Fine Arts degree programs.

Table 5 Minor Program Offered by the School of Fine Arts

## Art History/Visual Culture Minor

Visual Arts 2700 and 2701
18 credit hours in Art History/Visual Culture at the 3000- or 4000-level

### 7.5 School of Science and the Environment

www.grenfell.mun.ca/school-of-science-and-the-environment
The School of Science and the Environment offers the Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management and the Bachelor of Science with Majors in Computational Mathematics, Environmental Science, General Science, and Physics general degrees.
A Bachelor of Science (Honours) degree is available in Environmental Science.
Minors are available in Economics, Environment and Sustainability, Environmental Science, Environmental Science Biology Environmental Science Chemistry, Geography, Mathematics, Physics, and Science. Students for the Bachelor of Science degree offered by the School of Science and the Environment may complete a minor offered by the School of Science and the Environment, the School of Arts and Social Science, or the School of Fine Arts. See Table 19 Minor Programs Offered by the School of Arts and Social Science, Table 5 Minor Program Offered by the School of Fine Arts, and Table 10 Minor Programs Offered by the School of Science and the Environment.

Articulation agreements have been established with the College of the North Átlantic for students who have completed the Two-Year Fish and Wildlife Technician Diploma Program and the Two-Year Forest Resources Technician Diploma Program who wish to obtain the Bachelor of Environment and Sustainability degree.
Students previously admitted to the Bachelor of Arts, Major in Environmental Studies program and the Bachelor of Resource Management, Major in Sustainable Resource Management program must complete all program requirements by June 2021. Students currently completing the requirements of either of these programs must follow the Calendar regulations for the academic year in which they were admitted to the Major. Memorial University of Newfoundland calendars by academic year can be read at www.mun.ca/regoff/ calendar.php.
Students completing the Bachelor of Environment and Sustainability or Bachelor of Science degree programs offered by the School of Science and the Environment must also complete the School of Science and the Environment Core Program Requirements comprised of 24 credit hours.

### 7.5.1 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management

- The 120 credit hour, 40 course Bachelor of Environment and Sustainability with specialization in Environmental Studies or Resource Management program may be completed on a full or part-time basis as set out under Table 1 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management.
- A student must complete Core Program Requirements as outlined under School of Science and the Environment Core Program Requirements.
- The program consists of a common set of courses which provides an interdisciplinary understanding of environmental studies and resource management issues within the context of the physical, social and economic environments and two sets of courses that provide specialized training in either Environmental Studies or Resource Management.
- A Minor is required for this program.

Table 1 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management


### 7.5.1.1 Articulation Agreement - Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Fish and Wildlife Technician Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Fish and Wildlife Diploma Program offered by the College of the North Atlantic and who are entering the Bachelor of Environment and Sustainability Program will be awarded a total of 60 credit hours towards the 120 credit hour degree program.
- Students will be required to complete an additional 60 credit hours as outlined under Table 2 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Fish and Wildlife Technician Diploma Program Offered by the College of the North Atlantic.

Table 2 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Fish and Wildlife Technician Diploma Program Offered by the College of the North Atlantic

| Required Courses Major in Environmental Studies | Required Courses Major in Resource Management | Electives |
| :---: | :---: | :---: |
| Economics 1010, 3080, 3085 | Economics 1010, 3080 | 3 (Environmental Studies Major) or 6 |
| 3 credit hours in first year English | 3 credit hours in first year English | (Resource Management Major) credit |
| Environment and Sustainability 1000, | Environment and Sustainability 1000, | hours in elective courses. Three of these |
| 2000, 2001, 2200 or 2201, 3000, 4000, | 2000, 2001, 3000, 3001, 3100, 3101, | credit hours must be chosen from Art |
| 4010, 4200, 4201, 4950 | 4000, 4010, 4100, 4960 | History, Classics, English, History, |
| Geography 1050, 3222 | Environmental Science 4140 (or | Humanities, Languages, Philosophy, |
| Political Science 3351 or the former 3550, 3631 or the former 3731 | equivalent field course from Biology, Earth Science or Geography) | Religious Studies, Theatre, or Visual Arts. |
| Sociology 3040 | Geography 1050, 3222 Political Science 3631 or the former 3731 |  |

7.5.1.2 Articulation Agreement - Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Forest Resources Technician Diploma Program Offered by the College of the North Atlantic

- Students who have graduated from the two-year Forest Resources Diploma Program offered by the College of the North Atlantic and who are entering the Bachelor of Environment and Sustainability Program will be awarded a total of 60 credit hours towards the 120 credit-hour degree program.
- Students will be required to complete an additional 60 credit hours as outlined under Table 3 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Forest Resources Technician Diploma Program Offered by the College of the North Atlantic.

Table 3 Bachelor of Environment and Sustainability with Majors in Environmental Studies or Resource Management for Graduates of the Two-Year Forest Resources Technician Diploma Program Offered by the College of the North Atlantic

| Required Courses Major in Environmental Studies | Required Courses Major in Resource Management | Electives |
| :---: | :---: | :---: |
| Economics 1010, 3080, 3085 3 credit hours in first year English Environment and Sustainability 1000, 2000, 2001, 2200 or 2201, 3000, 4000, 4010, 4200, 4201, 4950 <br> Geography 1050, 3222 <br> Political Science 3351 or the former 3550, 3631 or the former 3731 Sociology 3040 | Economics 1010, 3080 <br> 3 credit hours in first year English <br> Environment and Sustainability 1000, <br> 2000, 2001, 3000, 3001, 3100, 3101, <br> 4000, 4010, 4100, 4960 <br> Environmental Science 4140 (or equivalent field course from Biology, <br> Earth Science or Geography) <br> Geography 1050, 3222 <br> Political Science 3631 or the former 3731 | 3 (Environmental Studies Major) or 6 (Resource Management Major) credit hours in elective courses. Three of these credit hours must be chosen from Art History, Classics, English, History, Humanities, Languages, Philosophy, Religious Studies, Theatre, or Visual Arts. |

Table 4 Suggested Program of Study for the Bachelor of Environment and Sustainability

| Year/Semester | Common Courses | Major in Environmental Studies | Major in Resource Management |
| :---: | :---: | :---: | :---: |
| Year 1, Fall Semester | Economics 1010 Environment and Sustainability 1000 <br> Geography 1050 |  | Biology 1001 |
| Year 1, Winter Semester | English 1000 Environmental Science 1000 | Political Science 2600 | Biology 1002 |
| Year 2, Fall Semester | $\begin{aligned} & \text { Environment and } \\ & \text { Sustainability } \\ & 2000 \\ & \text { Geography } 3222 \end{aligned}$ | Environment and Sustainability 2200 (students enrolled in the Environmental Studies Major are required to take either Environment and Sustainability 2200 or 2201) | Biology 2600 |
| Year 2, Winter Semester | Environment and Sustainability 2001 | Environment and Sustainability 2201 (students enrolled in the Environmental Studies Major are required to take either Environment and Sustainability 2200 or 2201) <br> One of: History 3030, Humanities 3020, Philosophy 2130 or the former 2561 Religious Studies 3880 |  |
| Year 3, Fall Semester | Economics 3080 Political Science 3631 or the former 3731 | Economics 2550 <br> Political Science 3351 or the former 3550 | Environment and Sustainability 3100 Environment and Sustainability 3101 |
| Year 3, Winter Semester | Environment and Sustainability 3000 Environment and Sustainability 3001 | Economics 3085 Sociology 3040 |  |
| Year 4, Fall Semester | Environment and Sustainability 4010 | Environment and Sustainability 4200 | Environment and Sustainability 4100 Environmental Science 4132, 4140 (or an equivalent field course from Biology, Earth Science, or Geography) |
| Year 4, Winter Semester | Environment and Sustainability 4000 | Environment and Sustainability 4201 Environment and Sustainability 4950 | Environment and Sustainability 4960 |

### 7.5.2 Bachelor of Science with Major in Computational Mathematics

www.grenfell.mun.ca/academics-and-research/Pages/Minors/Mathematics.aspx
This Mathematics Major covers the essential undergraduate topics in mathematics, develops rigorous logical thinking, and equips students with computational techniques to model and solve real-world problems. Courses used to complete the requirements of this major may be used to meet the requirements of a minor or second major in a different subject area excluding a minor in Science and a major in General Science.

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 5 Bachelor of Science with Major in Computational Mathematics.
- A student must complete Core Program Requirements as outlined under School of Science and the Environment Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.

Table 5 Bachelor of Science with Major in Computational Mathematics

### 7.5.3 Bachelor of Science with Major in Environmental Science

www.grenfell.mun.ca/academics-and-research/Pages/Minors/Environmental-Science.aspx
The Major consists of an Environmental Science Core which provides a broad appreciation of the interrelationships inherent in any study of the environment and one of two possible streams which provide the depth and focus for the degree program.

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 6 Bachelor of Science with Major in Environmental Science.
- A student must complete Core Program Requirements as outlined under School of Science and the Environment Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.

Table 6 Bachelor of Science with Major in Environmental Science

| Required Courses | Elective Courses |
| :---: | :---: |
| Courses as outlined under School of Science and the Environment Core Program Requirements. | Elective courses to make up the total of 120 credit hours. |
| Environmental Science Core <br> 54 credit hours as follows: <br> Biology 1001, 1002, 2600 <br> Chemistry 1200/1001 sequence or Chemistry 1050/1051 sequence. It is strongly recommended that students complete one of these sequences of Chemistry courses in their first year. <br> Earth Sciences 1000 <br> Mathematics 1000 , Statistics 2550 or equivalent <br> Physics 1020 or 1050 <br> Environmental Science 2000, 3000, 4000 <br> Environmental Science 4950 (or 4951) <br> Two of Environmental Science 4069, 4131, 4133, 4369, 4479, Environment and Sustainability 4201 <br> 3 credit hours chosen from Philosophy 2130 or the former 2561, Political Science 3351 or the former 3550, 3631 or the former 3731, Religious Studies 3880. Students are encouraged to take additional courses from this list as electives. <br> 6 credit hours chosen from Environmental Science 2360, Environmental Science 2370, Environmental Science 2430, Environmental Science 3072, Environment and Sustainability 2000 (this course is strongly recommended for the Biology Stream of the Environmental Science program). Students are encouraged to take additional courses from this list as electives. <br> It is recommended that students complete Environmental Science 1000. | If a student decides to complete a minor, it must be comprised of 8 courses, 24 credit hours chosen from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. |
| Environmental Science Streams <br> A student must choose one of the following streams: <br> Biology stream (27 credit hours) <br> Biology 2010, 2122 <br> Chemistry 2440 <br> One of Earth Sciences 1002 or Physics 1021 of Physics 1051 <br> Environmental Science 3110, $31303131,4132,4140$ (or equivalent fiêd course) <br> Chemistry stream ( 33 credit hours) <br> Chemistry 2210, 2301, 2400, 2401 <br> Environmental Science 3210, 3211, 3260, 3261, 4230 <br> Mathematics 1001 <br> Physics 1021 or 1051 <br> It is strongly recommended that students considering the Chemistry stream of the Environmental Science program complete Mathematics 1000 and 1001, Physics 1020 or 1050 and one of Physics 1021 or 1051 in their first year; Biology 1001/1002 may be delayed until second year for students in the Chemistry stream of the Environmental Science program. |  |

### 7.5.4 Bachelor of Science with Major in General Science

www.grenfell.mun.ca/academics-and-research/Pages/school-of-science-and-the-environment.aspx
Students completing the Major in General Science will complete a General Science Core. In addition, they will complete a minimum of 24 credit hours (or 18 credit hours in the case of Mathematics) in each of three streams chosen from Biology, Chemistry, Earth Systems, Mathematics or Physics. A student may not use the same course to satisfy the requirements of more than one stream. Students planning their course selection should be aware of the fact that most senior level science courses have one or more specified prerequisites.

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 7 Bachelor of Science with Major in General Science.
- A student must complete Core Program Requirements as outlined under School of Science and the Environment Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.



### 7.5.5 Bachelor of Science with Major in Physics

www.grenfell.mun.ca/academics-and-research/Pages/Minors/Physics.aspx

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 8 Bachelor of Science with Major Physics and Table 9 Suggested Program of Study for the Bachelor of Science with Major in Physics.
- A student must complete Core Program Requirements as outlined under School of Science and the Environment Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours.
- A Minor is not required for this program. However, courses used to complete the requirements of this major may be used to meet the requirements of a minor or second major in a different subject area excluding a minor in Science and a major in General Science.

Table 8 Bachelor of Science with Major in Physics

| Required Courses | Elective Courses |
| :---: | :---: |
| Courses as outlined under School of Science and the Environment Core Program Requirements. | Elective courses to make up the total of 120 credit hours. |
| Mathematics 1000, 1001, 2000, 2050, 2260 (or the former Mathematics 3260), 3202. <br> Since Mathematics 2000 is required for a number of upper-year Physics and Mathematics courses, a student not completing Mathematics 1001 in first year will require more time to complete the degree. A student who has completed Mathematics 1000 and Physics 1020 with a minimum grade of $65 \%$ may enrol in Physics 1051. Taking the sequence Physics 1020, 1021, and 1051 will increase the number of credit hours needed to complete the major <br> Physics 1050 (or 1020), 1051, 2053, 2056, 2400 or 2151, 2820, 3060, 3061, 3220, 3400, 3650, 4100, 4880, 4950. It is recommended that students complete Chemistry 1200 and 1001. A student who has completed Mathematics 1000 and Physics 1020 with a minimum grade of $65 \%$ may enrol in Physics 1051. Taking the sequence Physics 1020, 1021, and 1051 will increase the number of credit hours needed to complete the major <br> 9 additional credit hours in Physics chosen from Physics 3160, 3180, 3250, 3230, 3820. | If a student decides to complete a minor, it must be comprised of 8 courses, 24 credit hours chosen from Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment. |

Table 9 Suggested Program of Study for the Bachelor of Science with Major in Physics

| Year 1 <br> Fall \& winter | Chemistry 1200 (recommended) <br> Elective <br> English 1000 <br> Mathematics 1000 <br> Physics 1050 (or 1020) | Chemistry 1001 (recommended) <br> Elective <br> English 1001 <br> Mathematics 1001 <br> Physics 1051 |
| :---: | :---: | :---: |
| Year 2 <br> Fall and Winter | Elective <br> Mathematics 2000 <br> Mathematics 2050 <br> Physics 2400 or Physics 2151 <br> Physics 2820 | Elective <br> Elective <br> Mathematics 2260 <br> Physics 2053 <br> Physics 2056 |
| Year 3 <br> Fall and Winter | Elective <br> Mathematics 3202 <br> Physics 3060 <br> Physics 3220 <br> Physics 3400 | Elective <br> Elective <br> Physics 3061 <br> Physics 3160 and/or Physics 3250 <br> Physics 3650 |
| Year 4 <br> Fall and Winter | Elective <br> Elective <br> Elective <br> Physics 4100 <br> Physics 4880 | Elective <br> Elective <br> Elective <br> Physics 3180 and/or Physics 3230 and/or Physics $3820$ <br> Physics 4950 |

### 7.5.6 Minor Programs Offered by the School of Science and the Environment <br> www.grenfell.mun.ca/minor

Table 10 Minor Programs Offered by the School of Science and the Environment

## Economics Minor

Economics 1010 (or the former 2010), 1020 (or the former 2020), 3000, 3010
12 additional credit hours in Economics of which at least 6 must be at the 3000 or 4000 -level

## Environment and Sustainability Minor

Environment and Sustainability 1000, 2000, 2001, 3000
Environmental Science 1000
9 additional credit hours in Environment and Sustainability which must be at the 3000 or 4000 level

## Environmental Science Biology Minor

Biology 1001, 1002, 2010, 2122, 2600
3 credit hours from Environmental Science 3110, 3130, 3131, 4131
An additional 6 credit hours in Environmental Science of which at least 3 credit hours must be at the 3000 or 4000 level

## Environmental Science Chemistry Minor

Chemistry 1200, 1001, 2210, 2301, 2440
3 credit hours from Environmental Science 3210 or 3261
An additional 6 credit hours in Environmental Science of which at least 3 credit hours must be at the 3000 or 4000 level

## Environmental Science Minor

Biology 1001, 1002, 2600; or Chemistry 1200, 1001, 2440
Environmental Science 2000
Additional 12 credit hours in science courses within the Environmental Science program of which at least 6 credit hours must be at the 3000 or 4000 level

## Geography Minor

Geography 1050, 2001, 2102, 2195, 2302, 2425
6 additional credit hours in Geography which must be at the 3000 or 4000 level

## Mathematics Minor

Mathematics 1000, 1001
either 18 additional credit hours from Mathematics and Statistics courses at the 2000 level or higher, at least 6 credit hours shall be in courses at the 3000 level or higher (Physics 3820 can be used in place of a Mathematics course at the 3000 level); or
15 additional credit hours from Mathematics and Statistics courses at the 2000 level or higher, at least 6 credit hours shall be in courses at the 3000 level or higher (Physics 3820 can be used in place of a Mathematics course at the 3000 level); and 3 credit hours in one of Computer Science 1510, the former 1710, or Engineering 1020

## Physics Minor

Physics 1050 (or 1020), 1051, 2053, 2056, 2820.
An additional 9 credit hours in Physics at the 2000-level or above

## Science Minor

The Minor in Science may be chosen in courses from the following disciplines: Biology, Chemistry, Computer Science, Earth Sciences, Environmental Science, Mathematics, Physics, Science, and Statistics. Students who have completed courses drawn from other Science disciplines must obtain approval of the Committee on Student Academic Affairs upon recommendation of the Dean.
Mathematics 1000
6 additional credit hours in first year science courses (At least 3 credit hours must be in a laboratory course chosen from any science discipline except mathematics).
Five science courses beyond the 1000 level, at least 6 credit hours of which must be beyond the 2000 level. (Mathematics 1001 may be substituted for one of the 2000 level science courses).
Students for the Bachelor of Environment and Sustainability and Bachelor of Science degrees offered by the School of Science and the Environment may complete a minor offered by the School of Science and the Environment, the School of Arts and Social Science or the School of Fine Arts. See Table 19 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 10 Minor Programs Offered by the School of Science and the Environment.

### 7.6 Bachelor of Nursing (Collaborative)

Information regarding program requirements for the Bachelor of Nursing (Collaborative) degree program is located at the Faculty of Nursing, Program Regulations, Bachelor of Nursing (Collaborative) Program - Western Memorial Regional Hospital.

## 8 Honours Degrees

Programs are offered leading to the Honours Degrees of Bachelor of Arts, Bachelor of Business Administration, and Bachelor of Science.
An Honours Bachelor of Arts or Bachelor of Science degree requires, over and above the requirement of the General degree, a concentration at an advanced level in an approved field, consisting of a subject or subjects of specialization and/or related subjects, and a high quality of work throughout the program. An Honours degree is of distinct advantage to students who plan advanced work or careers in their chosen fields and also to those who have a clear commitment to some special field of study. An Honours degree with first or second class standing is, in many cases, a prerequisite for admission to a graduate program. The Honours Degree of Bachelor of Arts is available in Psychology and the Honours Degree of Bachelor of Science is available in Environmental Science and Psychology. An Honours Bachelor of Business Administration signifies superior academic achievement.

### 8.1 Admission and Registration for Honours Bachelor of Arts or Bachelor of Science Degrees

1. Admission to the Honours degree is competitive and limited, depending upon available resources. Students should consult the criteria established for the program in question. To be considered for admission to an Honours program a candidate shall complete an "Application For Admission to the Honours Program" form. The application must be approved by the Program Chair of the Major before the student can be admitted to the program.
A student who wishes to enter an honours program is strongly advised to consult the Program Chair at the earliest possible date, as it may not be possible to complete the requirements for the degree in the normal time if the decision to embark on the program is delayed beyond the end of the second year.
2. Students who have been awarded the General Degree of Bachelor of Arts or Bachelor of Science at Grenfell Campus may convert it to an Honours Degree of Bachelor of Arts or Bachelor of Science by following procedure outlined in 1. above.
3. Before registering for any semester or any session, the candidate is strongly advised to consult with the Program Chair on the student's choice of courses. Failure to comply with this requirement may result in denial of access to certain courses.

### 8.2 Admission and Registration for Honours Bachelor of Business Administration Degree

Students do not apply for admission to this program but rather must indicate their desire to be considered for the Bachelor of Business Administration (Honours) by the appropriate deadline date to graduate on the prescribed "Application for Graduation "form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

### 8.3 Course Requirements for Honours Bachelor of Arts or Bachelor of Science Degrees

Students for the Honours Degree of Bachelor of Arts or Bachelor of Science shall complete a program of studies which shall consist of not fewer than 120 credit hours subject to the following regulations:

1. All students are required to complete the Core Program Requirements governing the Bachelor of Arts and Bachelor of Science degrees in either the School of Arts and Social Science (for the Honours Bachelor of Arts or Honours Bachelor of Science in Psychology) or the School of Science and the Environment (for the Honours Bachelor of Science in Environmental Science).
2. All students must also submit an Honours thesis or dissertation on an approved topic which may be followed by an oral examination thereon. Two copies of the Honours thesis/dissertation must be submitted to the University Library upon completion. All Honours theses/dissertations in the University Library shall be available for unrestricted consultation by students and faculty except under very exceptional circumstances which must be approved by the relevant Committee on Student Academic Affairs. Copyright remains with the author. A signed release form must accompany a thesis or dissertation when it is submitted to the University Library.
3. Further courses shall be chosen:
a. minimum 60 credit hours in the major and, where applicable, not fewer than 24 credit hours in the minor; and
b. courses to make up a minimum of 120 credit hours, other than those required for the Core Program, major and minor, shall be chosen as follows:
i. any courses in Arts, Science, Social Science and Fine Arts
up to 15 credit hours in other subject areas.

### 8.4 Course Requîrements for Honours Bachelor of Business Administration Degree

A student must meet all the regulations governing the General Degree of Bachelor of Business Administration and Academic Standing for Honours Bachelor of Business Administration Degree.

### 8.5 Program Regulations for Honours Bachelor of Arts or Bachelor of Science Degrees

Students for Honours degrees must comply with such additional requirements of the appropriate Program(s) as approved by the Senate and printed in the University Calendar.

### 8.6 Program Regulations for Honours Bachelor of Business Administration Degree

A student must meet all the regulations governing the General Degree of Bachelor of Business Administration.

### 8.7 Academic Standing for Honours Bachelor of Arts or Bachelor of Science Degrees

In order to be considered for graduation with an Honours degree, a student shall obtain:

1. A grade of ' B ' $70 \%$ or better, or an average of $75 \%$ or higher in the courses that comprise the minimum number of credit hours in the Honours subject(s) prescribed by the program concerned as outlined under the regulations governing specific Honours degree programs, excluding 1000 -level courses. Students who wish to fulfil this requirement using repeated or substituted courses must obtain approval of the Program Chair and the relevant Committee on Student Academic Affairs. The Honours thesis or dissertation may not be repeated or substituted. A grade of $70 \%$ or better must be obtained in the Honours dissertation; and
2. An average of at least 2.75 points per credit hour in the courses required for the degree. See UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate), Grading for explanation of the point system.
For information regarding classification of degrees see UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation.

### 8.7.1 Classification of Degrees

1. If a student's general average is 3.25 points or better per credit hour in required courses and the average is 3.5 points or better per credit hour in the courses in the Honours subject (excluding 1000-level courses), the student shall be awarded an Honours degree with First Class standing.
2. If a student fulfils the conditions of Academic Standing above but not of Regulation 1. under Classification of Degrees, the student shall be awarded an Honours degree with Second Class standing.
3. No classification will be given to the degree awarded a student who has completed fewer than one half of the courses required for the degree at this University, or who has completed fewer than one half of the courses required for the degree at this University since 1959. All students for such degrees shall, however, fulfil the condition of Academic Standing above on the courses taken at this University since September 1959 in order to qualify for the degree.
4. A declared student for an Honours degree who fails to attain the academic standing specified in Academic Standing above but fulfils the academic requirements for a General degree shall be awarded a General degree, the classification of which shall be determined in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation.

### 8.8 Academic Standing for Honours Bachelor of Búsiness Administration Degree

Students are not permitted to repeat or substitute courses for the purposes of meeting the criteria below
A declared student for an Honours degree who fails to fulfil the criteria below but fulfils the requirements for the general degree will be awarded the general degree of Bachelor of Business Administration.
In order to be considered for graduation with an Honours degree, a student shall obtain:

1. a minimum overall average of $75 \%$ in the required Business courses prescribed in Table 6 Bachelor of Business Administration and courses selected from Table 7 Business Electives; and
2. obtain a minimum overall grade point average of 3.25 in the 120 credit hours required for the degree.

### 8.9 Honours in Environmental Science (B.Sc.)

### 8.9.1 Course Requirements for Honours in Environmental Science (B.Sc.)

1. Students must meet the General Regulations for Grenfell Campus Bachelor of Science degree.
2. Students must complete 81 or 87 credit hours as follows:
a. the Environmental Science Core requirements as outlined under Bachelor of Science with Major in Environmental Science.
b. the course requirements of a specific stream as outlined under Bachelor of Science with Major in Environmental Science.
3. Students must complete 3 additional credit hours in courses at the 4000 level. These credit hours normally will be drawn from: Environmental Science $4069,4131,4133,4369,4479$ and Environment and Sustainability 4201
Students, in close consultation with a faculty advisor and the agreement of the Chair of the Program, may select fourth-year honours requirement courses in place of those required above, so long as such selections are consistent with the Major to which they are added. Such honours selections will be subject to approval by the School of Science and the Environment Committee on Student Academic Affairs.
4. Honours graduates of the Environmental Science Program will have also completed a two-semester research project consisting of a research proposal and literature review course (Environmental Science 4951) and a research project course (Environmental Science 4959).
5. In order to be considerêd for graduation with an Honours degree, the candidate must satisfy the regulations regarding Academic Standing as specified under Honours Degrees.
Courses used to calculate the academic standing as outlined under Honours Degrees include all required Environmental Science and Chemistry courses for the Chemistry stream students and all required Environmental Science and Biology courses for the Biology stream students, excluding, in both cases, 1000 level courses.
More specifically, courses normally used for calculations would be:

## Biology stream

Biology 2010, 2122, 2600
Two of: Environmental Science 2360, 2370, 2430, 3072, or Environment and Sustainability 2000
Environmental Science 3110, 3130, 3131, 4132, 4140 (or equivalent)
Three of: Environmental Science 4069, 4131, 4133, 4369, 4479 or Environment and Sustainability 4201
Environmental Science 2000, 3000, 4000, 4951, 4959

## Chemistry stream:

Chemistry 2210, 2301, 2400, 2401
Two of: Environmental Science 2360, 2370, 2430, 3072, or Environment and Sustainability 2000
Environmental Science 3210, 3211, 3260, 3261, 4230
Three of: Environmental Science 4069, 4131, 4133, 4369, 4479, or Environment and Sustainability 4201
Environmental Science 2000, 3000, 4000, 4951, 4959

### 8.9.2 Honours Dissertation for Honours in Environmental Science (B.Sc.)

The honours project sequence (Environmental Science 4951 and 4959) involves the production of an honours dissertation. This dissertation will be evaluated by a three member committee that includes the dissertation supervisor(s) and that is approved by the Environmental Science faculty unit.

### 8.10 Honours in Psychology

The Honours B.A. and B.Sc. degrees in Psychology offer greater concentration in the discipline and also require a higher level of academic achievement than is required for the completion of a degree. The Honours degrees in Psychology at Grenfell Campus are 120 credit hour programs normally requiring four years for completion (See Honours Degrees).

### 8.10.1 Course Requirements for Honours in Psychology

Students must meet the General Regulations for Grenfell Campus Bachelor of Arts or Bachelor of Science degree.
Students must also complete:

1. Psychology 1000, 1001, 2025, 2125, 2225, 2425, 2625, 2825, 2925, 2950, 3950, 4910, 4925;
2. 15 credit hours from Psychology $3025,30403125,3126,3225,3226,3325,3425,3525,3625,3626,3627,3628,3725,3825$; and
3. a two-semester research project, Psychology 4951 and 4959.

Students for the Bachelor of Science (Honours) degree in Psychology shall also complete an additional 27 credit hours as follows:

1. 6 credit hours in Mathematics, which must include Mathematics 1000;
2. Biology 1001 and 1002 ;
3. Chemistry 1200 and 1001 OR Physics 1020 (or 1050) and 1021 (or 1051); and
4. 9 credit hours at the 2000 level or above (two courses of which must be laboratory courses) in one of the following subjects: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science or Physics.
In order to be considered for graduation with an Honours degree, the candidate must satisfy the regulations regarding Academic Standing as specified under Honours Degrees.
Students completing this program cannot receive credit for Psychology 2920.

### 8.10.2 Honours Thesis for Honours in Psychology

The Honours project sequence (Psychology 4951 and 4959) involves the production of an Honours thesis. This thesis will be evaluated by the thesis supervisor and an additional faculty member selected by mutual consent of the candidate and the supervisor.

## 9 Promotion Regulations

For all programs students must meet the meet the general academic regulations (undergraduate) of the University and all general and program regulations of Grenfell Campus. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate). In addition, student completing the Bachelor of Fine Arts (Theatre) or the Bachelor of Fine Arts (Visual Arts) must fulfill the promotion regulations outlined below as appropriate.

### 9.1 Bachelor of Fine Arts (Theatre)

### 9.1.1 Academic Performance

1. Attendance and participation in all studio courses and production rehearsals is vital to the collaborative nature of the program of study in Theatre. Absence from classes or rehearsals of any one student could jeopardize a production, the proper dissemination of practical skills and the overall safety of the students. Therefore attendance at all studio classes, rehearsals and crew calls will be compulsory.
2. A student who has failed a studio course shall not take more advanced courses in that discipline until the failed course has been satisfactorily completed.
3. A student shall complete all 1000 level Theatre courses before advancing to any 2000 level Theatre course.
4. A student whose average in the Theatre courses for the Bachelor of Fine Arts degree falls below 65 percent in any semester will be placed on probation within the program. A student placed on probation at the end of the final semester of the Theatre program will not be recommended for graduation.
5. A student will be required to withdraw from the program if the candidate's average in Theatre courses falls below 65 percent in each of two consecutive semesters of enrollment in the program.
6. A student who has withdrawn or who have been required to withdraw from the Bachelor of Fine Arts (Theatre) program and who wishes to re-enter the program must re-apply in competition after a lapse of two semesters by April 30 for the upcoming Fall semester or by August 30 for the upcoming Winter semester.
7. A student who has been required to withdraw twice from the Bachelor of Fine Arts (Theatre) program shall be ineligible for further admission.
8. The Bachelor of Fine Arts (Theatre) program is intended for full-time students only. Students are strongly advised to take the full course load as prescribed each semester and so progress through the degree in clearly defined blocks of courses.

### 9.2 Bachelor of Fine Arts (Visual Arts)

### 9.2.1 Academic Performance

### 9.2.1.1 Attendance

1. Attendance at all studio courses is considered vital to the program and will be required. Failure to attend may result in the student being dropped from the course.
2. A student whose average in Visual Arts courses falls below $65 \%$ in any semester will be placed on probation by the Visual Arts program.
3. A student registered beyond the first semester of the Foundation Year will be required to withdraw from the program if:
a. The student's cumulative average in Visual Arts courses required for the program falls below $65 \%$. or
b. The student's average in Visual Arts courses falls below $65 \%$ in each of two consecutive semesters of enrolment in the program.
4. A student will be denied graduation if, at the end of the final semester of the Visual Arts Program:
a. The student's cumulative average in Visual Arts courses required for the program falls below $65 \%$. or
b. The students term average in Visual Arts courses falls below $65 \%$ in each of the last two consecutive semesters of enrolment in the program.
A student denied graduation for either of these reasons will be permitted to register for Visual Arts courses without a waiting period and re-application, and is not bound by Regulation 7 below.
5. A student who has voluntarily withdrawn from the Bachelor of Fine Arts (Visual Arts) program and who wishes to re-enter must reapply by March $1^{\text {st }}$ for the upcoming Fall semester, or by August $30^{\text {th }}$ for the upcoming Winter semester.
6. A student who has been required to withdraw from the Bachelor of Fine Arts (Visual Arts) program and who wishes to re-enter must re-apply in competition after a lapse of two semesters by March $1^{\text {st }}$ for the upcoming academic year.
7. A student who has been required to withdraw twice from the Bachelor of Fine Arts (Visual Arts) program shall be ineligible for further admission to the Visual Arts Program.

### 9.2.1.2 Calculation of Visual Arts Average

1. Promotion status within the Visual Arts program will be determined by semester or cumulative average of Visual Arts courses only.
2. A failed Visual Arts course grade will be used to calculate the cumulative average for Visual Arts courses and the semester average for Visual Arts courses for the semester in which the fail occurs.
3. A failed visual arts course will not be used in calculating the cumulative average for Visual Arts courses beyond the semester in which it occurred but will remain on the academic transcript.

### 9.2.1.3 Probationary Promotion

A student whose semester average in Visual Arts courses falls below $65 \%$ will be placed on probation by the Visual Arts program.

### 9.2.1.4 Promotion Denied

1. A student registered beyond the first semester of 1000 level Visual Arts courses will be required to withdraw from the program if:
a. the student's cumulative average in Visual Arts courses required for the program falls below $65 \%$ or
b. the student's semester average in Visual Arts courses falls below $65 \%$ in each of two consecutive semesters of enrolment in the program.

### 9.2.1.5 Graduation Denied

1. A student will be denied graduation if, at the end of the final semester of the Visual Arts Program:
a. the student's cumulative average in Visual Arts courses required for the program falls below $65 \%$ or
b. the student's semester average in Visual Arts courses falls below $65 \%$ in each of their last two consecutive semesters of enrolment in the program.
A student denied graduation for either of these reasons will be permitted to register for Visual Arts courses without a waiting period and re-application, and is not bound by Regulation 7 under Attendance above.

## 10 Graduation

Upon meeting the qualifications for any of the programs listed above a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation " form. This form may be obtained on-line at Memorial Self Service. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 11 Waiver of Regulations

Every student has the right to request waiver of Grenfell Campus regulations. Students wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

### 11.1 General Information

- Grenfell Campus reserves the right in special circumstances to modify, alter, or waive any Grenfell Campus regulation in its application to individual students where merit and equity so warrant in the judgment of the relevant Committee on Student Academic Affairs (for the School of Arts and Social Science or School of Science and the Environment) or the Academic Studies Committee (for the School of Fine Arts).
All requests, other than requests for waiver of a prerequisite or co-requisite of a course, must be submitted to the appropriate School Committee on Student Academic Affairs or Academic Studies Committee for consideration. Waiver of a course prerequisite or corequisite may be granted by the course instructor.
- Any waiver granted does not reduce the total number of credit hours required for the degree.


## 12 Appeal of Decisions

Any student whose request for waiver of Grenfell Campus regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 13 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to
be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the appropriate Dean of the School.
Prerequisites may be waived by the Dean/Program Chair of the course area in question.

Upon the recommendation of the appropriate Program Chair(s), any Major requirements may be waived by the relevant Committee on Student Academic Affairs (for the School of Arts and Social Science or School of Science and the Environment) or the Academic Studies Committee (for the School of Fine Arts).
Some of the courses in this section of the Calendar are available only at Grenfell Campus. Students who choose to transfer from Grenfell Campus to the St. John's campus should see their faculty advisor to determine the extent to which such courses can be applied to their new program.

### 13.1 Anthropology

Anthropology 1030 and Anthropology 1031 or an equivalent course or courses are required of all students wishing to concentrate in anthropology.
The following courses, cross-listed with the Department of Sociology and identified by the prefix "S/A", are also taught at the introductory level: 2200, 2210, 2220, 2230, 2240, 2260, 2270, 2280, and 2350. These courses can be taken as first courses or may be taken following an Anthropology introductory course.
Anthropology courses are designated by ANTH.
1031 Introduction to Anthropology provides an overview of the field of social and cultural anthropology. It covers key anthropological concepts used to study issues such as inequality, social justice, the environment, work, politics and law, family, identity, gender and sexuality, ethnicity, spirituality, and communication. An emphasis is placed on human diversity, international examples, and processes of globalization. This course is suitable for students in all disciplines.
CR: the former ANTH 1000 or 2000
2200 Communities (S/A 2200) is an interdisciplinary examination of the concept of Community. Readings will include community studies from North America and Europe.
2210 Communication and Culture (S/A 2210) is an examination of verbal and non-verbal systems of communication, and the influence of language on human cognition.

2220 Labrador Society and Culture examines the Sociology and Anthropology of Labrador. The focus is on social and cultural aspects of contemporary Labrador.
2230 Newfoundland Society and Culture (S/A 2230) (same as Folklore 2230) examines the Sociology and Anthropology of the Island of Newfoundland. The focus is on social and cultural aspects of contemporary island Newfoundland.
CR: Folklore 2230
2240 Canadian Society and Culture (S/A 2240) is a descriptive and analytic approach to the development of Canadian society and culture.
2260 War and Aggression (S/A 2260) is a critical review of ethological, psychological and sociological approaches to the understanding of violence and organized aggression.

2270 Families (S/A 2270) is a comparative and historical perspective on the family as a social institution, the range of variation in its structure and the determinants of its development.
2280 The City (S/A 2280) examines varieties of urban life around the world and through history. The city as habitat and as spectacle.

2300 Newfoundland Folklore (same as Folklore 2300) is a survey of the various types of Folklore: tale, song, rhyme, riddle, proverb, belief, custom, childlore and others, with stress on their function in the Newfoundland community culture. Individual collection and analysis of materials from the students' home communities, supplemented by data from the Memorial University of Newfoundland Folklore and Language Archive.
CR: the former Folklore 3420, Folklore 2300
PR: Folklore 1000 or ANTH 1031
2350 Religious Institutions (S/A 2350) (same as Religious Studies 2350) is a comparative study of religious institutions and beliefs, calendrical feasts and solemnities, religious roles and hierarchies, ritual innovation and revitalization.
CR: Religious Studies 2350
UL: not applicable towards the Major or Minor in Anthropology
2410 Classics in Social and Cultural Anthropology is an examination of selected milestone monographs, ground-breaking studies for subdisciplinary specialties and major syntheses.

2411 Anthropologists in the Field base many of their ideas on experiences they have while living in other cultures. This course examines the human relationships through which anthropologists explore cultures and
how in turn these relationships affect the anthropologists and the development of their discipline.

2412 Threatened Peoples is an examination of key social and cultural factors involved in the global extinction of small-scale societies; the intrusive influences that jeopardize small-scale societies, such as disease; economic and military incursion; the role of international non-governmental agencies in aid of threatened peoples; and the role of the anthropologist in this human crisis.

2413 Modern World Cultures is an examination of significant studies of 20th century populations and their implications for understanding the human condition.

2500 Folk Literature (same as Folklore 2500) is an examination of the major genres of folk literature: folk narrative, folk poetry and song, folk drama, and the traditional generic forms within folk speech. An introduction to the textual, comparative and contextual methods of analysis. The literature discussed will be international in scope.
CR: Folklore 2500, the former Folklore 3400, English 3400, Sociology/ Anthropology 3400,
PR: Folklore 1000 or ANTH 1031
3053 Anthropology of Religion is a critical evaluation of anthropological research on religion, centering on seminal thinkers and major theoretical traditions. Special attention is given to the study of belief systems, and to relationships between belief and ritual.
CR: Religious Studies 3053
3080 The Third World is an examination of the anthropology of the Third World. The course considers perspectives on peasantry, including such topics as underdevelopment, land reform, hunger, political and social movement.
3083 Cultural Crises and the Environment is an examination of social and cultural aspects of dilemmas in the use of renewable and non-renewable resources such as animals, arable land, forests, fisheries, air, water, fossil fuel, and nuclear energy. Special attention to Third World and marginal populations.

3140 Social Movements (S/A 3140) is an examination of social movements which challenge prevailing social institutions and cultural values. Social movements considered may include religious cults and sects, millenarian movements, attempts at utopian and communal living, feminism, labour and revolutionary movements.
3210 Persistence and Change in Rural Society (S/A 3210) assesses the social and cultural significance of the rural experience in the face of expanding urbanism. Topics may include the nature of rural society in Canada, similarities between Canadian and European rural society, utopian and anarchist movements in rural life, and reaction of agricultural populations to external influence.

3314 Gender and Society (S/A 3314) is an examination of biological, psychological, social and cultural aspects of gender, with an emphasis upon contemporary directions of change in sex roles.

3520 Aboriginal History to 1763 (same as Archaeology 3520 and History 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.
CR: Archaeology 3520 and History 3520
3525 Aboriginal History from 1763 (same as Archaeology 3525 and History 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.
CR: Archaeology 3525 and History 3525
4071 Social and Cultural Aspects of Health and Illness (S/A 4071) covers topics which may include: cultural concepts of illness and health; theories of disease causation; relationships between social life and illness patterns; symbolic use of illness; variations in philosophies of treatment and in practitioner/patient relationships; the social organization of medicine. Open to those without normal prerequisites by permission of the Instructor.
4072 Social and Cultural Aspects of Death (S/A 4072) covers topics which may include: symbolic meanings and values attached to death; cultural and historical variations in the management of death, e.g. treatment of the 'terminally ill', burial rites, the mourning process, and the social fate of survivors, together with the social and psychological meanings of these behaviours. Open to those without normal prerequisites by permission of the Instructor.

4440 Music and Culture (S/C 4440) (same as Folklore 4440, Music 4040, the former Music 4440) explores traditional music as an aspect of human behaviour in Western and non-European cultures. Examination of the
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
functions and uses of music; folk-popular-art music distinctions; and the relation of style to content. Outside reading, class exercises and individual reports will be required.
CR: Folklore 4440, Music 4040, the former Music 4440

### 13.2 Biochemistry

Biochemistry courses are designated by BIOC.
1430 Biochemistry for Nurses is an introduction to the chemistry and structure-function relationships of carbohydrates, lipids and proteins. Basic metabolism of carbohydrates and fats, with emphasis on the biochemical fluctuations that occur in human health and disease. A brief introduction to molecular genetics. This course may not be used for credit to fulfil the requirements for a major in the Department of Biochemistry. Entry into this course is restricted to students in the Bachelor of Nursing (Collaborative) Program. Prospective fast-track program students should consult with the Faculty of Nursing concerning admission to this course.
CR: the former BIOC 2430
LC: 4
PR: Level 3 Chemistry or Chemistry 1010 or Chemistry 1810 or equivalent

### 13.3 Biology

Students may obtain credit for only 6 1000-level credit hours in Biology. Normally, these courses will be Biology 1001-1002, which are prerequisite to all higher courses in Biology, except where noted below.
Biology courses are designated by BIOL.
1001-1002 Principles of Biology is an introduction to the science of Biology, including a discussion of the unity, diversity and evolution of living organisms.
LH: 3
PR: BIOL 1001 is a prerequisite for BIOL 1002; Science 1807 and Science 1808

2010 Biology of Plants is a study of the structure, function and reproductive Biology of plants, with emphasis on the vascular plants, and on their relationship to environment and human activities.
LC: 3
LH: 3
PR: BIOL 1001, BIOL 1002, and Chemistry 1001; Science 1807 and Science 1808

2040 Modern Biology and Human Society I examines various aspects of the human body, and the implications of modern biological research for human beings. Topics include cancer; diet and nutrition and associated diseases; circulatory disease, immunity, human genetics, biorhythms, new diseases, genetic engineering and reproductive engineering.
UL: cannot be used towards the Minor, Major or Honours programs in Biology
2041 Modern Biology and Human Society II examines the origins and consequences of the environmental crisis of the 20th century. Topics include the population explosion, energy, material cycles, air and water and tand pollution, global food supplies, the fisheries, wildiands, renewable and nonrenewable resources, environmental ethics.
UL: cannot be used towards the Minor, Major or Honours programs in Biology

2122 Biology of Invertebrates is a study of the invertebrates with emphasis on structure and function, adaptations and life histories. The laboratories will present a broad survey of the major invertebrate groups.
CR: the former BIOL 3122
LH: 3
PR: BIOL 1001 and BIOL 1002; Science 1807 and Science 1808
2210 Biology of Vertebrates is a study of the vertebrates, with emphasis
on structure and function, adaptations and life histories.
CR: the former BIOL 3210
LH: 3
PR: BIOL 1002; Science 1807 and Science 1808
2250 Principles of Genetics is an introduction to Mendelian and molecular genetics. Phenotype and genotype, behaviour of alleles in genetic crosses, chromosome theory of inheritance, genetic linkage, molecular Biology of DNA, RNA and protein, molecular basis of mutation, recombinant DNA, applications of genetic biotechnology.
CO: Chemistry 2440 or Chemistry 2400
CR: the former BIOL 3250
LH: 3
PR: Chemistry 2440 or Chemistry 2400, BIOL 1001 and 1002, Chemistry 1010, the former 1011 or 1050/1051; Science 1807 and Science 1808

2600 Principles of Ecology is a conceptual course introducing the principles of ecology, including theoretical, functional and empirical approaches.

CR: the former BIOL 3600
LH: 3
PR: BIOL 1002; Science 1807 and Science 1808
3053 Microbiology for Nurses is a course on the fundamentals of microbiology with an emphasis on medical microbiology. The course will include topics such as: host responses to infections, human diseases caused by microorganisms, and the control and exploitation of microorganisms. Entrance is restricted to Nursing students in the Bachelor of Nursing (Collaborative) program.
LH: 2
PR: Science 1807 and Science 1808
UL: cannot be used as one of the required courses for the Minor, Major, or Honours in Biology, nor is it acceptable for any of the joint programs between Biology and other disciplines

### 13.4 Business

Enrolment in some Business courses is limited and first priority will be given to students registered in Grenfell Campus's Business Administration programs.
Business courses are designated by BUSN.

### 13.4.1 Core Program Course Descriptions

1010 Introduction to Business provides students with an overview of business in the Canadian environment, with a focus on the economic and business systems, as well as major social, technological, and global trends. The course introduces students to fundamental concepts related to many functional areas of business, such as human resource management, marketing, production, operations management, accounting, and financial management. Emphasis is placed on relating the course material to current events in the business world, as well as helping students acquire critical and analytical thinking skills.
CR: Business 1000 and the former Business 2001
UL: may be used in place of Business 1000 in programs offered by the
Faculty of Business Administration at the St. John's Campus
1020 Introduction to Entrepreneurship is designed to give students a broad understanding of the field of entrepreneurship, the role that entrepreneurship plays in society, and the importance of small business in Canada. Topics will include the nature and theories of entrepreneurship, the characteristics and behaviours of entrepreneurs, and the entrepreneurial process in small and large firms. Students will get to think and act in a creative manner, engage with local entrepreneurs, and evaluate their own entrepreneurial skill set. Students will learn entrepreneurial, technical and communication skills that will be useful in any organizational setting.
CR: Business 1600
2020 Business and Professional Communication focuses on the development of written, oral, and visual communication skills for modern professional environments. Students will learn the fundamentals of business research, analytical thinking, presentation design and delivery, professional document creation, and effective writing. This course will introduce theoretical background and provide the opportunity for students to develop their expertise in teamwork, critical thinking, writing and presentation skills.
CR: Business 2000, Business 2010
PR: 6 credit hours in first-year English
2100 Financial Accounting I introduces the concepts of financial accounting using the Canadian framework. Topics include the nature of accounting, the accounting cycle, and preparation of financial statements: balance sheet, income statement, statement of owner's equity and statement of cash flow. Specific topics include accounting for assets as well as current and long-term liabilities in both service and merchandising operations.
CR: Business 1101, Business 2102, the former Business 3100, the former Business 2100

2110 Managerial Accounting I introduces students to the concepts of preparing and using financial data for managerial decision making. Topics include job costing, process costing, activity-based costing, cost-volumeprofit analysis, budgeting, and variance analysis.
CR: Business 2101, Business 2102, the former Business 4100
PR: BUSN 2100 or Business 1101
2200 Marketing I introduces students to marketing strategy development, including a consideration of a firm's marketing-specific goals, strengths, weaknesses, and opportunities, environmental and competitive analysis, marketing research, consumer behaviour, and market segmentation, targeting and positioning. Students will assess and develop marketing strategies and action plans that address strategic marketing challenges in these areas.
CR: Business 1210, the former Business 1201, the former Business 2201, the former Business 3200
PR: BUSN 1010 or Business 1000 or BUSN 1020
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

2250 Marketing II introduces students to practical decision making based on the concepts, analyses, and activities that comprise marketing tactics: product management, pricing considerations, promotional strategies, channels of distribution, customer relationship marketing, implementation, evaluation, and control.
CR: Business 2210, the former Business 1201, the former Business 2201, the former Business 3200
PR: BUSN 2200 or Business 1210
2300 Organizational Behaviour highlights the contribution of the applied behavioural sciences to the study of work in today's organizations with a particular focus on individual and group processes. Students will examine topics in personality, perception, motivation, communication, group dynamics, leadership, workforce diversity, conflict management and organizational culture.
CR: Business 3310, the former Business 2301, the former Business 4300
2310 Business Leadership further develops concepts from Organizational Behaviour and provides students with an opportunity to explore various theories of leadership in the context of today's business environment. Students will consider topics related to effective leadership and management that may include an examination of leader behaviour, attitudes and style, the role of self-awareness and emotional intelligence, communication style, followership, employee motivation and engagement, power and influence tactics, and ethics and social responsibility in decision making.
CR: the former Business 3350
PR: BUSN 2300 or Business 3310 or the former Business 2301
3010 Organizational Theory emphasizes the fundamental concepts of organizational theory: the nature of organizational structure and its determinants in a complex global economy, the boundaries and impacts of organizational environments, measures of organizational effectiveness, and the roles of organizational learning, culture, innovation, development and change in shaping today's organizations. In addition to exploring the underlying theory of these organization-level phenomena, students will have an opportunity to critically apply course concepts to their own professional experiences.
CR: Business 5301, the former Business 5300
PR: BUSN 2300 or Business 3310 or the former Business 2301
3030 Canadian Business Law I introduces the student to the Canadian legal system and substantive areas of the law that are of particular relevance to the business setting. Topics include torts, negligence, contracts, legal structures for business formation, employment and property law. Emphasis will be placed on risk management. The course is taught through a variety of means used to improve the student's critical thinking skills.
CR: Business 4000, the former Business 3000
PR: completion of at least 60 credit hours
3300 Human Resource Management provides background in the theory and practice of human resource management (HRM) in modern organizations. Students will learn the fundamentals of traditional human resource functions that focus on forecasting, attracting, retaining, developing, evaluating, and compensating employees Contemporary issues in HRM will also be considered.
CR: Business 4320
PR: BUSN 2300 or Bûsiness 3310
3410 Operations Management teaches fundamental concepts regarding the nature, design and management of the operations function of organizations. Focus will be on capacity planning, forecasting, quality management, inventory management, and material requirements planning. CR: Business 3401, the former Business 5400
PR: Statistics 2500
3500 Financial Management introduces the concepts of financial management in Canadian capital markets. Focus will be on financial analysis and forecasting; working capital management; time value of money; and financing options.
CR: Business 4500, the former Business 4110
PR: Economics 1010 (or the former 2010), and Statistics 2500
3600 Enterprise Development explores and examines the venture creation process. Emphasis is on the critical role of the entrepreneur and the underlying attributes and norms guiding the steps in creating a new business venture. Students will have the opportunity to experience closely the entrepreneurial process, as well as gain the skills and competencies required in developing a viable business plan and negotiating for start-up financing.
CR: Business 3630, the former Business 5030, the former Business 5600, the former Business 7030
PR: BUSN 1020 or Business 1600, BUSN 2100 or Business 1101, and BUSN 2250 or Business 2210

4010 Strategic Management teaches students how to analyze and evaluate an organization's corporate strategies from the perspective of the CEO. This capstone course integrates and synthesizes knowledge acquired in the program and applies skills developed in all functional areas of
business. Students work to identify, diagnose and recommend appropriate action for challenges faced in various types of business organizations. Conceptual frameworks, analytical tools and critical thinking are emphasized.
CO: BUSN 4040
CR: Business 4050, Business 7000
PR: BUSN 2110 or Business 2101, BUSN 2250 or Business 2210, BUSN 2300 or Business 3310, BUSN 3010 or Business 5301, BUSN 3030 or Business 4000, BUSN 3300 or Business 4320, and BUSN 4040 or Business 5302

4040 International Business Management focuses on issues of globalization and the role of business in the global economy. Topics include the role of multinational corporations in economic development, market entry strategies for small- and medium-sized enterprises, the challenges of managing economic, cultural, and technological changes and differences,
the role of international investment and FDI, as well as international the role of international investment and FDI, as well as international business strategies required to compete in today's highly interconnected world. Students will gain the skills to function within the international and global business context.
CR: Business 5302, the former Business 7302
PR: BUSN 1010 or Business 1000, Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020)
4070 Change Management and Implementation examines the current thinking and research regarding the strategic management of change. Change in a variety of organization settings will be introduced and analyzed with respect to identifying barriers to change, using change agents, creating learning environments, implementing, and evaluating. The course will focus on the leadership, implementation and strategies for developing a culture for change.
PR: BUSN 4010, or Business 4050 and Business 7000

### 13.4.2 Business Electives Course Descriptions

2060 Business Ethics allows students to gain an understanding of the importance of ethics in everyday decision making in the professional environment. Students will explore their own ethical positions as they examine strategies for making ethical decisions. The course introduces students to ethical theories and frameworks and will help students develop the skills to anticipate, critically analyze, and appropriately respond to many types of ethical issues on both individual and organizational levels.
CR: the former Business 2808
2320 Workplace Skills offers students an opportunity to explore knowledge and practice skills that will enable them to professionally navigate many of the challenges in the workplace environment. Class participation forms a significant part of this course, and substantial amounts of classroom time will be devoted to role plays, case studies and group discussion.
PR: completion of at least 30 credit hours
2500 Personal Finance introduces the essentials of individual financial management. Students will further develop an understanding and skills in areas such as basic personal income tax, financial security, saving and investing, the use of credit, insurance, investments, and borrowing.
PR: 3 credit hours in Mathematics and completion of at least 30 credit hours

3060 Negotiation in Organizations teaches students strategies and skills for negotiating with various stakeholders in a variety of workplace settings. Using current theory and research on negotiation, the course will focus on developing awareness and skills of the various aspects of the negotiation process. The course will include a practical component that will allow students to develop their negotiation skills.
PR: completion of at least 60 credit hours
3100 Intermediate Accounting I continues the study of financial accounting by focusing on specific topics such as current assets, long-term investments, capital assets, intangibles, financial assets and revenue recognition.
CR: Business 6100
PR: BUSN 2100 or Business 1101
3110 Intermediate Accounting II continues the study of financial accounting by focusing on specific topics such as long term debt, employee future benefits, shareholders' equity, and financial statement presentation and analysis.
CR: Business 6110
PR: BUSN 2100 or Business 1101
3120 Taxation I is an introduction to the fundamentals and principles of the taxation system in Canada. Emphasis is placed upon the calculation of the tax liability of individuals and corporations.
CR: Business 6120
PR: BUSN 2100 or Business 1101, and BUSN 3030 or Business 4000
3150 Intermediate Managerial Accounting is the study of in-depth managerial accounting concepts. This course will focus on topics such as
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
budget preparation and analysis, cost management, cost analysis, pricing decisions, and performance management techniques.
PR: BUSN 2110 or Business 2101
3220 Services Marketing explores the distinctive nature and characteristics of services, the unique opportunities and challenges associated with the marketing of services, the role of service providers in determining service quality and its connection to customer satisfaction, and the distinctions and connections between tangibles and intangibles. In addition to considering how services marketing requires an alternative application of the traditional marketing mix, students will also examine how service marketing mix strategies vary in the context of for-profit and non-profit organizations.
CR: Business 6230
PR: BUSN 2250 or Business 2210 or the former Business 2201
3230 Social Media Marketing examines the relevance and importance of social media tools in a contemporary marketing environment. Students will learn to apply and adapt traditional marketing strategy and tactics in a social media context and will gain practical experience through the development of an integrated social media strategy.
CR: Business 2220, the former Business 6004, the former Business 6042, the former Business 6240
PR: BUSN 2250 or Business 2210 or the former Business 2201
3240 Understanding Consumer Behaviour considers the impact of consumer behaviour and the consumer decision making process on corporate and marketing strategy. Students will examine the complexity of concepts that influence the purchase, consumption, and post-purchase behaviours of individuals including culture, reference groups, self-image, perception, personality and lifestyle.
CR: Business 3210, the former Business 5200
PR: BUSN 2250 or Business 2210 or the former Business 2201
3320 Labour Relations introduces the structure and function of the Canadian labour relations system. Labour relations management in Canada is highlighted with emphasis on the players in the union environment, the collective bargaining process, the dispute resolution process and the overall administration of the collective agreement.
CR: Business 4330 or the former Business 3320
PR: BUSN 1010 or Business 1000
3510 Financial Management II continues the concepts of financial management in Canadian capital markets. Focus will be on asset management, capital budgeting, valuation, dividend policy and extension of long-term financing options.
CR: Business 5500, the former Business 5140, the former Business 7140 PR: BUSN 3500 or Business 4500

3610 Social Entrepreneurship examines the research and practice of social entrepreneurship. The course introduces students to the theories and models of social entrepreneurship; students will also learn about the role and contribution of social entrepreneurship to society, define viable social enterprise concepts, and evaluate the characteristics of social entrepreneurs.
PR: BUSN 1020 or Business 1600
3620 Franchising and Buying a Business introduces students to the concept of franchising and buying an enterprise. Topics include the nature of franchising in Canada, the characteristics of the franchisee-franchisor agreement, legal considerations, as well as policies and strategies in successful franchising. Students will also learn the important factors involved in buying and selling an enterprise, the valuation models to assess the value of a business, as well as the negotiation dynamics in the buying and selling process.
CR: the former Business 6500
PR: BUSN 1020 or Business 1600
3800-3850 Special Topics is a range of special topics courses in Business. PR: successful completion of at least 60 credit hours is normally required
4020 Business Ethics and Corporate Social Responsibility acknowledges the complexities of ethical and socially responsible workplace decision making given the pressures and inter-relationships among business, government, society and the environment. Students will explore topics such as the social-economic business system, business ideologies, business ethics, social responsibilities of business, stakeholder and issues management, and sustainability.
CR: Business 7010
PR: BUSN 3010 or Business 5301
4030 Canadian Business Law II expands upon the topics covered in Canadian Business Law I. The substantive areas of law from BUSN 3030 are considered at a more advanced level; additional topics include landlord and tenant, leasing, insurance and guarantees, sale of goods, mortgages and real estate transactions, the regulation of business, and international business transactions. Critical analysis is emphasized in this course.
CR: Business 5000
PR: BUSN 3030 or Business 4000
non-profit organizations in Canada. Students will learn what distinguishes the non-profit sector from traditional descriptions of business and government, with particular emphasis given to organizational structure, funding, and culture. Topics considered may include organizational strategy and governance, managing paid and non-paid human resources, fundraising and financial management, marketing and communications, and accountability.
PR: BUSN 2250 or Business 2210, BUSN 2300 or Business 3310, BUSN
3300 or Business 4320, and BUSN 3500 or Business 4500
4080 Business in Film engages students to examine, reflect on and discuss the role of business and its evolution in society. Topics include business and its contribution to socio-economic and community development, the role of stakeholders, the nature of the corporation, the impact of change management and change agents, and trends in functional areas of business. This seminar uses a combination of popular films, as well as documentaries to highlight issues, challenges, and opportunities in business administration from both a practical and an academic point of view.

## PR: completion of at least 90 credit hours

4120 Taxation II is a continuation in the study of the income tax system in Canada. Focus will be on tax planning for corporations and individuals, sales tax, succession and estate planning, partnerships, trusts, and deferred income plans.
CR: Business 7150
PR: BUSN 3120 or Business 6120
4130 External Auditing introduces the theory and concepts of external auditing. Emphasis will be placed upon legal liability, materiality and risk, internal control, and audit evidence and strategy as well as the case studies of the audit of specific business processes.
CR: Business 6130
PR: BUSN 3100 or BUSN 3110 or Business 6100 or Business 6110
4210 Marketing Research is designed to help students develop an understanding of the value of marketing research in strategic decision making. Students will become familiar with different methods and tools for collecting, analyzing, and interpreting data in a marketing research context.
CR: Business 5220, the former Business 6200
PR: Statistics 2500, and BUSN 2250 or Business 2210 or the former Business 2201
4220 Business-to-Business Marketing and Relationships presents a comprehensive view of the complexities of business-to-business marketing concepts, and the critical role of developing and managing business relationships. Particular attention is paid to organizational buying/purchasing behavior, supplier relationship management, and the analysis of business relationships from both dyadic and network perspectives.

CR: BUSI 5250
PR: BUSN 2250
4230 International Marketing examines marketing in a global context with a particular focus on the strategic significance of the international dimension on marketing efforts. Students will explore various marketing challenges around global marketing opportunities such as exporting and direct entry strategies, contending in unfamiliar competitive environments, navigating complex social and cultural and political and legal environments, and adapting the marketing mix and activities to suit specific foreign market needs.
CR: Business 7240, the former Business 6001
PR: BUSN 2250 or Business 2210 or the former Business 2201
4310 Recruitment and Selection explores the role of recruitment and selection in the larger context of human resource management. Students will acquire the knowledge and skills needed to successfully design and implement strategic recruitment and selection initiatives in a variety of organizations. Topics may include the analysis of job requirements, legal considerations, selection criteria and methods, testing methods, interviewing techniques, and process evaluation.
CR: Business 6312
PR: BUSN 3300 or Business 4320
4510 Investments is a study of capital markets and the financial services industry. Emphasis will be placed upon investment securities, risks, markets and mechanics, and portfolio management for personal and institutional investments.
CR: Business 6510, the former Business 6140
PR: BUSN 3500 or Business 4500
4610 Family Business Management focuses on introducing students to the theory and practice of family business issues, such as understanding the difference between family business and other types of businesses and examining the role of family and non-family members involved in the business. Other topics include understanding the succession planning process, learning to resolve and manage conflicts, and exploring the challenges of multigenerational businesses.
CR: the former Business 6500
PR: BUSN 1020 or Business 1600

4060 Managing Non-Profit Organizations explores the management of

[^7]innovation to create a sustainable and competitive business. The course explores how organizational creativity is developed and examines both the drivers and barriers to managing employees through this process. Emphasis will be placed on the role of leadership in developing and maintaining innovation and its use in stimulating organizational growth. The course will focus on product, process and service innovation and consider innovation in all aspects of the core business functions.
PR: completion of at least 90 credit hours
4800-4850 Special Topics is a range of special topics courses in Business. PR: successful completion of at least 90 credit hours is normally required

5010 Experiential Learning: Event Planning allows students to gain important event management, organizational and communication skills through the planning of one or more events on campus and throughout the greater community.
PR: restricted to Grenfell Campus Bachelor of Business Administration students who have completed at least 90 credit hours

5020 Experiential Learning: Field Study allows students to gain hands-on experience through one or more field studies. Students may work with organizations such as communities, associations or businesses in various settings across Newfoundland and Labrador. Field study opportunities may include, for example, working from the Bonne Bay Marine Station.
PR: restricted to Grenfell Campus Bachelor of Business Administration students who have completed at least 90 credit hours
5030 Experiential Learning: Internship places students in a business setting and provides the student with opportunities to use their business skills in a real business environment.
PR: restricted to Grenfell Campus Bachelor of Business Administration students who have completed at least 90 credit hours
5040 Experiential Learning: Small Business Consulting allows students to gain hands-on experience by working with small businesses. Student groups will be involved in such projects as business plan writing, market research, market strategies, strategic analysis or other business-related functions.
PR: restricted to Grenfell Campus Bachelor of Business Administration students who have completed at least 90 credit hours

5050 Experiential Learning: Student Leadership allows students to gain leadership and project management skills to empower fellow students and the community at large by assuming senior roles in student driven programs such as Enactus Grenfell.
PR: restricted to Grenfell Campus Bachelor of Business Administration students who have completed at least 90 credit hours

### 13.5 Chemistry

Attendance for all Chemistry Laboratory sessions is mandatory. Failure to attend may result in a failing grade or deregistration from the course.
Students are strongly advised to complete the Chemistry sequence appropriate to their stream (Chemistry 1200/1001 or 1010 /the former 1011, or the former 1011/the former 1031 or 1050/1051) on the campus they first attend prior to transfer to another campus. Consult the credit restrictions listed under the St. John's Campus Department of Chemistry section of the University Calendar.
Chemistry courses are designated by CHEM.
1001 General Chemistry II is rates of reaction, chemical equilibria, thermodynamics, and introdu
CR: credit may be obtained for only one of the following pairs of courses. the former CHEM 1000 and CHEM 1001; CHEM 1200 and CHEM 1001
LC: 4 including tutorials
LH: 3
PR: CHEM 1200 or equivalent; Science 1807 and Science 1808
1200 General Chemistry I is atomic structure and bonding, stoichiometry, reactions in aqueous solutions, gases, energetics of chemical reactions, the periodic table, chemical bonding and molecular geometry, intermolecular
forces. This introductory course is intended for students who have a knowledge of high school chemistry. This course is offered at Grenfell Campus only.
AR: attendance is required
CO: credit may be obtained for only one of the following pairs of courses: the former CHEM 1000 and CHEM 1001; CHEM 1200 and CHEM 1001
LC: 4
LH: 3
PR: Science 1807 and Science 1808
1810 Elements of Chemistry is matter, scientific measurement, atomic
theory, the periodic table, chemical compounds and elementary bonding theory, the mole, chemical reactions, the chemistry of selected elements, gases, solutions, stoichiometry. This course is specifically intended for those who have no background in chemistry. This course is offered at Grenfell Campus only.
AR: attendance is required
CR: the former CHEM 1800
LC: 4
LH: 3
PR: Science 1807 and Science 1808
UL: may not be used as one of the Chemistry courses required for a B.Sc. Degree with a Specialization in Environmental Science at Grenfell
Campus, nor for a Major or Honours in Chemistry, nor towards fulfilment of the 78 credit hours in science courses required for the B.Sc. degree on the St. John's campus.

1900 Chemistry in Everyday Life is a course that shows the relevance of chemistry in our daily lives. Following an introduction to atomic structure and chemical bonding, the course will focus on some of the following topics: organic chemistry and fuels; redox processes and batteries; acids, bases, and household cleaners; phases and detergents; the chemical components of foods; polymers and plastics; toiletries, and pharmaceuticals.
UL: may not be used as one of the required courses towards a Minor, Major, or Honours in any science degree program
2210 Introductory Inorganic Chemistry focuses on fundamental concepts in the chemistry of $\mathrm{s}, \mathrm{p}$, and d block elements and their compounds. Emphasis will be placed on periodic trends in physical and chemical properties, molecular symmetry, molecular orbital diagrams, simple crystal structures, Lewis acid/base theory, and introductory coordination chemistry.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
LH: 3
PR: Science 1807 and Science 1808; minimum 65\% in CHEM 1001 or a minimum 60\% in CHEM 1051

2301 Thermodynamics and Kinetics builds upon knowledge of physical chemistry from first year. It covers the three laws of thermodynamics for ideal and real systems as well as chemical kinetics. Topics in thermodynamics include the thermodynamics of ideal and real gases, phases, and solutions, the Maxwell relations, equilibria between phases, and in electrolyte solutions. The integrated rate laws for simple and complex mechanisms, and the temperature dependence of reaction rates in terms of kinetic molecular theory are some of the topics discussed in the kinetics section of the course.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CR: the former CHEM 2300
LH: 3
PR: Science 1807 and Science 1808; minimum 60\% in CHEM 1051, or a minimum 65\% in either CHEM 1001 or the former CHEM 1031; Mathematics 1001. Physics 1051 or Physics 1021 is recommended.

2302 Quantum Chemistry and Spectroscopy examines the quantum mechanics of simple systems such as the particle in a box, the harmonic oscillator, linear rotor, and hydrogen-like atoms. Topics also include orbital quantum numbers, spin, many electron atoms, an introduction to quantum mechanical methods, the electronic structures of molecules, bonding, and symmetry. Furthermore, electronic, rotational, and vibrational spectroscopy will be discussed as well as modern applications of spectroscopy and lasers. AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CO: Mathematics 2000 is recommended
CR: the former CHEM 3301
LH: 3
PR: Science 1807 and Science 1808; minimum 60\% in CHEM 1051, or a minimum 65\% in either CHEM 1001 or the former CHEM 1031; Mathematics 1001 and Physics 1051 or Physics 1021

2400 Introductory Organic Chemistry I is a course on bonding involving carbon; conformations and sterochemistry; introduction to functional groups and nomenclature; properties, syntheses and reactions of hydrocarbons, alkyl halides, alcohols and ethers.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 2440
LH: 3
PR: a minimum 60\% in CHEM 1051, or CHEM 1010 and the former CHEM 1011 with a grade of at least $80 \%$ in each; or the former CHEM 1011 with a grade of at least $85 \%$; or CHEM 1001 (or the former 1031) with a grade of at least 65\%; Science 1807 and Science 1808

2401 Introductory Organic Chemistry II is an introduction to the interpretation of mass, infrared, ${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR spectra; properties, syntheses and reactions of simple aromatic and heteroaromatic compounds,

[^8]ketones, aldehydes, amines, carboxylic acids and their derivatives; aldol and related reactions.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course
CR: CHEM 2440
LH: 3
PR: CHEM 2400; Science 1807 and Science 1808
2440 Organic Chemistry for Biologists is an introduction to the principles of organic chemistry with an emphasis on material relevant to biological molecules. The laboratory will introduce techniques and illustrate concepts covered in the course. This course is designed primarily for Biology Majors.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 2400
LH: 3
PR: Science 1807 and Science 1808; CHEM 1001 or CHEM 1051 or a minimum 60\% in the former CHEM 1011
UL: may not be used for credit by Chemistry or Biochemistry Majors and will not serve as a prerequisite for any other Chemistry course.

3261 Atmospheric Chemistry (same as Environmental Science 3261) provides a comprehensive study of the chemistry of the Earth's atmosphere. Beginning with an overview of planetary atmospheres, we follow the evolution of the Earth's atmosphere until today. Atmospheric chemical processes are interpreted from the perspectives of chemical kinetics, chemical thermodynamics, molecular orbital theory, and molecular spectroscopy. The mechanisms of stratospheric reactions are studied in the context of the ozone layer, while those of the troposphere are linked to the so-called 'greenhouse effect' and aspects of pollution. The very different upper-atmosphere chemistry is also studied.
CR: Environmental Science 3261
PR: CHEM 2210, CHEM 2301 or permission of the instructor and Program Chair

### 13.6 Classics

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the appropriate Dean of the School.
Classics courses are designated by CLAS
1100 Life in Ancient Greece s a general illustrated survey of the origins and evolution of Ancient Greek Civilization. The course introduces the student to Greek social and political institutions, religion and myth, and achievements in art, philosophy, science and literature, as well as the influence of Ancient Greece on the modern world.
CR: the former CLAS 1000, the former CLAS 2000
1120 and 1121 Elementary Latin is an introduction to the grammar and syntax of Latin, with particular attention paid to the acquisition of basic skills in reading, composition, and aural comprehension.
CR: the former CLAS 120A and 120B
PR: CLAS 1120 is the prerequisite for CLAS 1121
1130 and 1131 Elementary Ancient Greek is an introduction to the grammar and syntax of ancient Greek, with particular attention paid to the acquisition of basic skills in reading, composition, and aûral comprehension.
CR: the former CLAS 130A and 130B
PR: CLAS 1130 is the prerequisite for CLAS 1131
1200 Life in Ancient Rome is a general illustrated survey of the origins and evolution of Ancient Rome. The course introduces the student to social, political, and legal institutions, the growth of the Roman Empire, Roman art, literature, and religions, as well as Rome's pervasive influence in the modern world.
CR: the former CLAS 1000, the former CLAS 1101, the former CLAS 2001
2010 Greek Art and Architecture is an introduction, through illustrated
lectures, to the study of the art and architecture of Ancient Greece.
CR: the former CLAS 3100, the former CLAS 3101
2015 Roman Art and Architecture is an introduction, through illustrated lectures, to the study of the art and architecture of Ancient Rome.
CR: the former CLAS 3100, the former CLAS 3102.
2020 History of the Hellenistic World (same as History 2034) is a survey of the history of the Mediterranean world and the Near East from the death of Alexander the Great in 323 BC until the incorporation of the Kingdom of Egypt in the Roman Empire in 30 BC. Particular attention is given to the influence of the new monarchies on political, social and cultural developments in both Greek and non-Greek communities.
CR: History 2034

2035 History of Classical Greece (same as History 2035) is a survey of Greek History from the Bronze Age to the death of Alexander the Great, with special reference to the social and political institutions of the fifth century, B.C.

CR: History 2035, the former CLAS 3910, the former History 3910, the former CLAS 2030, the former History 2030

2040 History of Rome (same as History 2040) is a survey of Roman History from the early monarchy to the reign of Constantine with special reference to society and politics in the late Republic and early Empire.
CR: CLAS 2041, CLAS 2042, History 2040, the former CLAS 3920, the former History 3920

2055 Women in Greece and Rome is an examination of the role of women in ancient Greece and Rome from the perspectives of religion, literature, art, society, and politics. Critical assessments of the scholarship and methodologies (including feminist methodologies) relevant to this topic will be included.

2701 History of Ancient Philosophy (same as Philosophy 2201, the former 2701) is a survey of the origin and development of Western philosophy among the Greeks and Romans.
CR: Philosophy 2201, the former 2701

## 2800 Classical Drama I - inactive course.

2801 Classical Drama II -inactive course.
3010 Greek Religion (same as Religious Studies 3010) is a study of the role of religion in the private and public life of the Greek world.
CR: Religious Studies 3010, the former CLAS 3121, the former Religious Studies 3121
3020 Roman Religion (same as Religious Studies 3020) is study of the role of religion in the private and public life of the Roman world.
CR: the former CLAS 3121, the former Religious Studies 3121, Religious

## - Studies 3020

3090 Alexander and the Macedonians (same as History 3090) investigates the impact of the conquests of Alexander the Great and his Macedonian Successors on the political, social, cultural, intellectual, and religious world of the Mediterranean and Near East between Alexander's accession in 336 and the battle of Ipsus in 301, when his vast empire was carved into Hellenistic kingdoms
CR: History 3090
3110 Greek Literature in Translation - inactive course.
3111 Latin Literature in Translation - inactive course.
3130 Greek and Roman Mythology (same as Folklore 3130) is a comparative study of the major myths of Greece and Rome as embodied in the literary and artistic remains of the ancient world with reference to their origins and their influence on later art and literature.
CR: Folklore 3130
3405 Tragic Drama in Greece and Rome is a detailed examination of the tragic dramas of ancient Greece and Rome. A selection of plays by Aeschylus, Sophocles, Euripides and Seneca will be read in English translation. Topics to be discussed include the development of ancient tragedy, its literary, performative and thematic traditions, its representation of social and historical conditions, and its influence on later tragic drama.
CR: the former Classics 2805
3415 Epic Poetry in Greece and Rome offers a detailed and in-depth study of the epic poetry or ancient Greece and Rome. The course will examine the poems of Homer, Apollonius of Rhodes and Virgil in English translation. Instructors may include additional poems. Topics to be discussed include the development of epic poetry, its literary traditions and its role in Greek and Roman society.
CR: the former CLAS 2060
3700 The Ancient World in Film examines the representation of the history and cultures of the ancient world in film. A selection of films will be studied and extensive reference will be made to the ancient evidence which informs them. The ancient world's impact on modern Western society will be considered together with the film industry's recasting of the ancient world in response to modern social and historical developments.

4000 Seminar in Greek History and Society will have the topics to be studied announced.

4010 Seminar in Roman History and Society will have the topics to be studied announced.

4020 Seminar in Greek Literature and Culture will have the topics to be studied announced.

4030 Seminar in Roman Literature and Culture will have the topics to be studied announced.

[^9]
### 13.7 Computer Science

Computer Science courses are designated by COMP
1600 Basic Computing and Information Technology offers an overview of computers and information technology. It provides students with the knowledge necessary to answer questions, such as: What is a computer system? How does it work? How is it used? This is done through the use of popular spreadsheet, word processing and database software packages and the Internet. Social issues and implications will also be included
CR: the former Business 2700, the former COMP 2650, the COMP 2801 LH: 3
PR: Level III Advanced Mathematics or Mathematics 1090 or 109B, which can be taken concurrently

### 13.8 Earth Sciences

## Earth Sciences courses are designated by EASC.

1000 Earth Systems is a survey of the structure, function and interrelations of Earth's lithosphere, hydrosphere, atmosphere and biosphere. Topics include an exploration of the physical and chemical properties of planetary materials, forces driving and sustaining Earth systems, and biological modifiers (including humankind) on the Earth today.
LH: 3
PR: Science 1807 and Science 1808
1001 Evolution of Earth Systems - inactive course.
1002 Concepts and Methods in Earth Sciences is an introduction to a broad range of concepts concerning the development of the geological record and the Earth; practical methods for collection of field based data; topics in map interpretation and geometric analysis, stratigraphy, paleontology, structure, petrology, and geophysics. The course is presented with an emphasis on the development of practical skills needed to pursue a career in Earth Sciences.
LH: 3
PR: EASC 1000; Science 1807 and Science 1808
2150 The Solar System describes the basic astronomy of the Solar System, tracing the search to understand motion of the Sun, Moon and planets in the sky: modern observations of planets, moons, comets, asteroids and meteorites and what they tell us about the origin and evolution of the Solar System. This course is designed for students taking Earth Sciences as an elective.
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Earth Sciences

3811 Paleontology is an outline of the major changes in life forms from Archaean times through the Phanerozoic to the present day, including details of invertebrate and vertebrate faunas and major floral groups; mechanisms and effects of mega-, and microevolution in the fossil record; Biology and classification of organisms and summaries of their geological significance in biostratigraphy, paleoecology and rock-building; relationships between major cycles of evolution and extinction to global processes. This course has a laboratory component.
CR: Biology 3811, the former EASC 3801, the former Biology 3800 LH: 3
PR: either Biology 2120 (or Biology 1001 and Biology 1002) and EASC 1002; or Biology 2122 and Biology 2210; Science 1807 and Science 1808

### 13.9 Economics

## Economics courses are designated by ECON

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1010 Introduction to Microeconomics I (same as the former ECON 2010) examines scarcity and opportunity cost. Demand and supply. Elasticity. Household demand: marginal utility. Household demand: indifference curves. Production functions. Short-run and long-run cost functions. Perfect competition in the short run and the long run. Monopoly.
CR: the former ECON 2010
1020 Introduction to Macroeconomics (same as the former ECON 2020) covers national income accounting, aggregate income analysis, money, banking and foreign trade.
CR: the former ECON 2020
2550 Economic Statistics and Data Analysis is an analysis of economic statistics and the use of economic data. A course designed to introduce students to the task of economic data collection, description and analysis. Emphasis will be on interpretation and analysis of data using computer software programs.
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020), and Statistics 2500 or equivalent.

3000 Intermediate Micro Theory I is the basic microeconomic theory course; consumer demand, indifference curve analysis, theory of production and cost, factor substitution, and the theory of the firm under perfect
competition and monopoly
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3001 Intermediate Micro Theory II is a continuation of basic microeconomic theory; the theory of imperfect competition, theory of factor pricing under various market structures, general equilibrium and welfare economics.
PR: ECON 3000
3010 Intermediate Macro Theory I is aggregate analysis including consumer, investment, government and international sectors, the role of money, determinants of aggregate supply, and the effects of autonomous behavioural changes and fiscal and monetary policies on unemployment, price levels and the balance of payments.
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3011 Intermediate Macro Theory II is a consideration of modern theories of macroeconomics, dynamics, empirical evidence and simulation of the national economy. Emphasis on the availability and effectiveness of government policy instruments
PR: ECON 3010
3030 International Economics: Issues and Problems in a Canadian Context is an intermediate course in international economics. The course covers the theory of comparative advantage, the structure and policy issues of the Canadian balance of payments, the foreign exchange market and the institutional aspects of international commerce
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3050 Economic Forecasting: Methods and Applications - inactive course.
3080 Natural Resource and Environmental Economics is application of economic analysis to renewable and honrenewable natural resource industries such as the fishery, forestry, and mining. Emphasis is given to the criteria for optimal resource use under various market structures and their implications for public policy. Issues of environmental resource management and pollution control will also be covered.
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3085 Issues in Ecological Economics (same as the former Environmental Studies 3085) aims to explore the dynamic interaction between the economic system and the ecological system that sustains it by using transdisciplinary theoretical approaches and methodologies. The main focus of this course will be on Ecological Economics concepts such as low and high entropy, biotic and abiotic goods and services, stock-flow resources, carrying capacity, throughput, co-evolution, sustainable scale, use value, and their applications in a problem-solving context.
CR: same as the former Environmental Studies 3085
PR: ECON 1010 (or the former 2010)
3150 Money and Banking examines the operation of the money and banking system, with special emphasis on Canadian problems. Monetary theory will be treated in relation to income theory and foreign trade.
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3160 Financial Economics provides an analysis of the major building blocks of the modern theory of financial economics and their implications for decision-making. To reflect that modern finance is a branch of economics, emphasis will be on how general economic principles and analytical techniques can be applied across all finance sub-fields. Topics include the basic pillars in finance-intertemporal optimization, asset valuation, risk management-and selected issues that will vary each year.
CR: Business 4500 (St. John's), the former Business 4500 (Grenfell)
PR: Mathematics 1000 or its equivalent, ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020). Students are recommended to take ECON 2550 or its equivalent prior to taking thus course.
3550 Mathematical Economics I examines linear algebra and differential calculus, with applications to economics.
PR: Mathematics 1000 or equivalent with a "B" standing, or Mathematics 2050 and ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020)

3551 Mathematical Economics II covers integral calculus, difference and differential equations, with applications to Economics
PR: ECON 1010 (or the former 2010) and/or ECON 1020 (or the former 2020), ECON 3550

4550 Econometrics I covers estimation of the general linear regression model with emphasis on fundamental theory and examples from published empirical research.
PR: ECON 2550, 3000 and 3010.
4551 Econometrics II covers further problems in econometric theory and

[^10]technique; multicollinearity, autocorrelation, nonlinear estimation, and the identification and estimation of systems of equations. Published empirical research will be discussed and each student will be expected to perform an original empirical study.
PR: ECON 4550

### 13.10 English Language and Literature

### 13.10.1 English Core Courses

1000 Critical Reading and Writing in Prose Forms is an introduction to the essay, short fiction and the novel. Emphasis is placed on critical reading and thinking strategies; composition of essays, including use of quotations and documentation, revision and editing; and literary analysis. All sections of this course follow the CRW guidelines available at www.mun.ca/hss/CRW
CR: cannot receive credit for more than one of English 1000, 1050, 1090 or the former 1080, the former 1100 or for more than one of 1001, 1051, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103, and 1110; cannot receive credit for more than one of English 1020, the former 1030 or 1110; cannot receive credit for more than 6 credit hours at the first year level including unspecified transfer credits

1001 Critical Reading and Writing in Poetry and Drama builds upon the essay writing and critical analytical strategies begun in English 1000. Emphasis is placed on developing composition skills in essay writing, conducting research, and examining the genres of poetry and drama. All sections of this course follow the CRW guidelines available at www.mun.ca/ hss/CRW.
CR: cannot receive credit for more than one of English 1000, 1050, 1090 or the former 1080, the former 1100 or for more than one of 1001, 1051, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103, or 1110; cannot receive credit for more than 6 credit hours at the first year level including unspecified transfer credits
PR: English 1000 or equivalent
1110 Critical Reading and Writing II (Context, Substance, Style) is an examination of prose texts such as essays, articles and reviews. Students write for different purposes and audiences. Emphasis is placed on critical reading and writing: analysing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing.
CR: cannot receive credit for more than one of English 1000, 1050, 1090 or the former 1080, the former 1100 or for more than one of 1001 , 1051, 1191 or the former 1101, 1192 or the former 1102,1193 or the former 1103, or 1110; cannot receive credit for more than 6 credit hours at the first year level including unspecified transfer credits
PR: English 1000, the former English 1080
2005 Literary Survey I (The beginnings to 1660) introduces students to the major writers by detailed study of selected texts. The course will include such authors as Chaucer, Mallory, Shakespeare, Spenser, Bacon, Webster, Donne and works such as Beowulf, the Old English Elegies and Gawaine and the Green Knight. Recommended for English specialization students that English 2005 be taken first in the English 2005-2006-2007 sequence. CR: English 2000, the former English 2110
PR: English 1000 and one of English 1001, 1
2006 Literary Survey II (1660-1837) introduces students to the major writers by detailed study of selected texts. The course will include such authors as Dryden, Pope, Swift, Johnson, Fielding, Blake, Wordsworth, Austen, Byron, Keats and Shelley. Recommended for English specialization students that English 2006 be taken second in the 2005-2006-2007 sequence.
PR: English 1000 and one of English 1001, 1110
2007 Literary Survey III (1837 to the present) introduces students to the major writers by detailed study of selected texts. The course will include such authors as Tennyson, Browning, Arnold, Hardy, George Eliot, Dickens, Yeats, T.S. Eliot and Dylan Thomas. Recommended for English specialization students that English 2007 be taken third in the English 2005-2006-2007 sequence.
CR: English 2001, the former English 2111
PR: English 1000 and one of English 1001, 1110
3205 Shakespeare Survey is a study of at least eight plays, two from each dramatic mode: comedy, history, tragedy, and romance.
CR: credit may be obtained for only two of English 3200, English 3201, English 3205, and English 3206
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3206 Shakespeare and the Classical Tradition is a study of the relationship between Shakespeare and his major classical sources, with a particular focus on the use of classical literature in the Renaissance.
CR: credit may be obtained for only two of English 3200, English 3201,
English 3205, and English 3206
PR: successful completion of at least 6 credit hours in English courses at
the second-year level
3395 The Literary Uses of English from the Earliest Times to the Present is an exploration of the development of the English language, as evidenced by its literary uses.
CR: the former English 2401
PR: successful completion of at least 6 credit hours in English courses at the second-year level

4105 Critical Approaches and Theory is a survey of critical approaches to English Literature, particularly those adopted by twentieth century readers. The course will attempt to give an account of the theories on which these approaches are based and some attention will be paid to the application of different approaches to specific works of literature.
CR: English 4101
PR: successful completion of at least 6 credit hours in English courses at the third-year level
4950 Individual Project in English is an individual project of a creative, or a critical, or a research character on a topic which is subject to the approval of the Program Chair. The topic will be prepared under the supervision of a designated faculty member or members.
CR: English 4990
PR: successful completion of at least 6 credit hours in English courses at the third-year level

### 13.10.2 Dramatic Literature

2350 Introduction to Drama I is a survey of the major plays in the history of western drama from the Greeks to the end of the eighteenth century.
CR: English 2002
PR: English 1000 and one of English 1001, 1110
2351 Introduction to Drama II is a survey of the major plays in the history of western drama from the 19th Century to the present.
CR: English 2002
PR: English 1000 and one of English 1001, 1110
3021 English Drama to 1580 is a study of the development of English drama from the Middle Ages to 1580. The course may also consider the popular arts, such as folk plays and mumiming.
PR: successful completion of at least 6 credit hours in English courses at the second-year level
3171 Irish Drama is a study of representative Anglo-Irish drama by such authors as Wilde, Shaw, Yeats, Synge, Lady Gregory, O'Casey, Behan, Friel and Molloy.
CR: the former English 3170, the former English 3180
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3181 Drama of the Restoration and Eighteenth Century is a study of major dramatic texts from 1660 to the end of the eighteenth century.
PR: successful completion of at least 6 credit hours in English courses at the second-year level
3275 Modern Drama (1830-1930) is a study of western drama and performance during the period 1830-1930, with a focus on theatrical and dramatic texts and movements, as well as artistic, social, political, technological, and philosophical influences.
CR: the former English 3300, the former English 4300
PR: successful completion of at least 6 credit hours in English courses at the second-year level
4302 Contemporary British Drama is a study of representative dramatic works of contemporary British drama.
PR: successful completion of at least 6 credit hours in English courses at the third-year level

4305 Contemporary Drama is a study of modern and post-modern western drama and performance from 1930 to the present, with a focus on theatrical and dramatic texts and movements, as well as artistic, social, political, technological and philosophical influences. Recommended previous course: English 3275.
CR: English 4301, the former English 3301
PR: successful completion of at least 6 credit hours in English courses at the third-year level

4307 Contemporary Canadian Drama is a study of contemporary drama and performance in Canada, focussing on texts representative of Canada's cultural and regional diversity.

## CR: English 3156

PR: successful completion of at least 6 credit hours in English courses at the third-year level
4308 20th Century American Drama is a study of American drama and performance from the turn of the century to the present, focussing on the theatre's historic role in the definition, reinforcement and scrutinizing of American mythology.
CR: English 3260
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4317 Elizabethan-Jacobean Drama is a survey of Shakespeare's dramatic rivals and the Elizabethan and Jacobean repertoires.
CR: English 3022
PR: English 3200 or English 3201 and successful completion of at least 6 credit hours in English courses at the third-year level

4836-4844 Special Topics in Drama is supervised study in specialized areas of dramatic literature. Course topic, design, and requirements to be determined through consultation by the student with the instructor
PR: permission of the instructor and successful completion of at least 6 credit hours in English courses at the third-year level

### 13.10.3 Canadian Literature

2145 Pride Literature in Canada considers literature that has been shaped by alternative sexualities, gender identities, and trans experiences (LGBTQI voices).
PR: English 1000 and one of English 1001, 1110
2146 Canadian Prose after 1949 is a study of the outstanding works of Canadian prose from 1949 to the present.
CR: English 2150, English 2151, the former English 3146
PR: English 1000 and one of English 1001, 1110
2155 Newfoundland Literature is a study of Newfoundland literature with emphasis on representative writers since 1949.
CR: English 3155
PR: English 1000 and one of English 1001, 1110
2156 Canadian Short Stories is a study of Canadian short stories which aims to give the student a heightened appreciation of individual short stories, and some sense of the range of Canadian accomplishment in the genre.
PR: English 1000 and one of English 1001, 1110
3145 Canadian Fiction to 1949 is a study of outstanding works of Canadian fiction from the beginnings to 1949.

PR: successful completion of at least 6 credit hours in English courses at the second-year level

3147 Canadian Poetry to 1949 is a study of representative Canadian poetry from the pre-confederation period to 1949.
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3148 Canadian Poetry After 1949 is a study of Canadian poetry from 1949 to the present, with emphasis on the work of major poets and an examination of the various styles and theories of poetry developed during the period.
CR: English 4850
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3149 Canadian Prose is a study of selected works of Canadian prose, covering both fiction and non-fiction.
PR: successful completion of at least 6 credit hours in English courses at the second-year level
4307 Contemporary Canadian Drama course description can be found in the dramatic literature list above.
CR: English 3156
PR: successful completion of at least 6 credit hours in English courses at the third-year level

4825-4835 Special Topics in Canadian Literature is a variety of topics to be offered as resources permit.
PR: successful completion of at least 6 credit hours in English courses at the third-year level

### 13.10.4 Modern Literature

2215 American Literature to 1900 is a study of the historical origins and development of nineteenth century American Literature, concentrating on a selection of works within their political, social and artistic contexts.
CR: the former English 2214, 2216
PR: English 1000 and one of English 1001, 1110
2242 Science Fiction is a survey of Science Fiction from its earliest days to the present. Subjects that will be considered include the evolution of the genre, the relations among humans, technology and multinational capitalism, and the significance of memory and space.
CR: English 2811
PR: English 1000 and one of English 1001, 1110
2243 Introduction to Humour in Literature begins with a survey of humour theories from antiquity to the present, and proceeds to a study of various forms and strategies of humour through a selection of works in English. Students will study texts exploring the roles that humour plays in relation to topics such as transgression, iconoclasm, class, sexuality, gender, ethnicity, culture, politics and religion.

CR: the former English 2121
PR: English 1000 and one of English 1001, 1110
2244 The Graphic Novel - Historical, Cultural and Literary Contexts (same as Social/Cultural Studies 2244) examines the historical, cultural and literary impact of the Graphic Novel; investigates its continuing development; and introduces students to significant works within the genre.
CR: English 3842, Social/Cultural Studies 2244
PR: English 1000 and one of English 1001, 1110; one of Folklore 1000, Anthropology 1031, or Sociology 1000

2245 Supernatural Fiction examines the evolution of the fiction of the supernatural as a distinct literary genre, focusing on writers who made significant contributions to the field.
PR: English 1000 and one of English 1001, 1110
2705 Modern World Literature in Translation is a study of modern world literature in English translation, with focus on writers of the twentieth century who have attained international stature.
PR: English 1000 and one of English 1001, 1110
2805 Women's Writing to 1900 is a study of writing by women in the British Isles and North America from the Middle Ages to 1900, including such items as letters and journals as well as fiction, poetry, and drama.
CR: English 3810, English 3830. This credit restriction replaces the note in earlier calendars and is retroactive to September 1,4993.
PR: English 1000 and one of English 1001, 1110
2870 Children's Literature is an introduction to literature written for children and young people. Beginning with an examination of the history of children's literature in the British Isles and North America, the course will focus on twentieth century and contemporary works, touching on a broad range of genres, audiences, and reading levels.
PR: English 1000 and one of English 1001, 1110
2905 Introduction to Creative Writing will introduce students to three main areas of creative writing: poetry, prose fiction, and creative non-fiction (travel writing, autobiography, journalism). Much of the emphasis will be on writing as a medium of communication. For this reason, some of the instruction will be the workshop system in which students act as each other's readers and audience.
PR: English 1000 and one of English 1001, 1110
3192 Modern Scottish Literature focusses on representative Scottish texts from the twentieth and twenty-first centuries studied within Scotland's distinctive historical and cultural contexts.
CR: ENGL 3190
PR. successful completion of at least 6 credit hours in English courses at the second-year level
3215 20th Century American Literature is study of American poetry and fiction from 1900 to 1960.
CR: ENGL 2217, ENGL 2218, the former English 4260, the former English 4261, the former English 4270
PR: successful completion of at least 6 credit hours in English courses at the second-year level
3216 20th Century British and Irish Literature is a study of British and Anglo-Irish poetry and fiction from 1900 to 1960.
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3245 The American Satirical Novel focuses on novels from the twentieth century to the present which examine from a satirical standpoint the vices, follies and shortcomings of American society, presenting critiques of issues such as race, gender, sexuality, education, employment, politics, religion, warfare, consumerism, technology, media, and celebrity.
CR: English 3001
PR: successful completion of at least 6 credit hours in English courses at the second-year level. It is strongly recommended that students take ENGL 2243 prior to taking ENGL 3245

3810 20th Century Non-Fiction Writing by Women is a study of twentieth century topical writing by women, including writing about social, political, and artistic and literary questions. Non-traditional as well as traditional genres will be studied.
CR: English 2805, English 3830. This credit restriction replaces the note in earlier calendars and is retroactive to September 1, 1993.
PR: English 2805 or permission of the instructor and successful completion of at least 6 credit hours in English courses at the second-year level

3905 Creative Writing is a workshop course for aspiring writers of poetry and/or fiction. Limited enrolment. Applicants will be required to submit a sampling of their previous and current work.
CR: English 3900, English 3901
PR: permission of the instructor and successful completion of at least 6 credit hours in English courses at the second-year level

4245 Contemporary Fiction in English is an in-depth study of a selection of recent short fiction and novels in English. The focus will be on recent

[^11]developments in American, British, Irish and Commonwealth fiction (excluding Canadian).

PR: successful completion of at least 6 credit hours in English courses at the third-year level

4246 Contemporary Poetry in English is an in-depth study of contemporary poetry in English. The focus will be on major poets and developments in the U.S.A., Britain, Ireland and the Commonwealth (excluding Canada) since 1945.
PR: successful completion of at least 6 credit hours in English courses at the third-year level

4861-4870 Special Topics in Modern Literature is a variety of topics to be
offered as resources permit.
PR: successful completion of at least 6 credit hours in English courses at the third-year level

4905 Advanced Creative Writing is a workshop course for creative writers who have demonstrated considerable talent and skill in poetry and/or prose fiction. Limited enrolment

PR: permission of the instructor and successful completion of at least 6 credit hours in English courses at the third-year level

### 13.10.5 English Courses for Non-Major Students

2010 Comprehension Writing and Prose Style (I) will chiefly emphasize the development of (a) the capacity to understand and appreciate the varieties of prose through close analysis of a wide range of examples, and
(b) the ability to write expository and other kinds of prose.

CR: English 1110
PR: English 1000 and one of English 1001, 1110
3110 Greek Literature in Translation (same as Classics 3110) is representative readings in English of the principal literary forms of Classical Greece. The literary achievement of the Greeks and their contributions to Western letters and culture.
CR: Classics 3110
PR: successful completion of at least 6 credit hours in English courses at the second-year level

3111 Latin Literature in Translation (same as Classics 3111) is representative readings in English of the principal literary forms of Republican and Imperial Rome. The literary achievement of the Romans and their contribution to Western letters and culture.
CR: Classics 3111
PR: successful completion of at least 6 credit hours in English courses at the second-year level

### 13.11 English as a Second Language

011F Core Intensive English Program covers reading through a variety of types of texts, vocabulary development, writing development, and academic listening and note-taking skills.
AR: attendance is required
$\mathrm{CH}: 0$
013F Core Intensive English Program covers reading, writing, speaking, listening, grammar and vocabulary development at an intermediate level through a variety of texts.
AR: attendance is required
CH: 0
014F Core Intensive English Bridge Program I covers reading, writing, speaking, listening, grammar and vocabulary development at a highintermediate level through a variety of academic texts.
AR: attendance is required
CH: 0
015F Core Intensive English Bridge Program II covers reading, writing, speaking, listening, grammar and vocabulary development at an advanced level through a variety of academic texts.
$A R$ : attendance is required
$\mathrm{CH}: 0$

### 13.12 Environment and Sustainability

Environment and Sustainability courses are designated by ENSU.
The following number scheme is used to identify courses:
1st digit = year
2nd digit indicates specialization
0 = common
1 = Resource Management
2 = Environmental Studies
9 = Independent Research Project

1000 Introduction to Sustainability examines historical and contemporary models of resource management and decision making as well as the supporting theoretical basis for an interdisciplinary approach to natural resources that includes ecological, economic, social and political perspectives. Case studies will be presented from Newfoundland and Labrador, across Canada, and around the world.
CR: the former Environmental Studies 1000, the former Sustainable Resource Management 2000

2000 Introduction to Geographic Information Systems explores the structure, design, science, and applications of digital geospatial information and geospatial technologies. These include Geographic Information Systems (GIS), Global Positioning Systems (GPS) and Remote Sensing (i.e. 3 technology), and the Geoweb such as Google Earth, Location Based Services (LBS). Students will also gain exposure to hands-on exercise and analysis on the current GIS software.
CR: the former Environmental Studies 2000, Geography 2195
LH: 3
PR: Environmental Science 1000 or Earth Sciences 1002 or Geography 1050

2001 Introduction to Systems Thinking exposes students to complex system dynamics that challenge our understanding of environmental and resource management. It is designed to help students develop a systems' intuition for analyzing environmental and resource management problems and provide the skills needed to better understand complex interactions within and among natural and human systems. It covers the introduction of basic structure and behavior of systems and key interrelationships in socialecological systems.
CR: the former Sustainable Resource Management 2001
PR: ENSU 1000
2200 Outdoor Pursuits - Fall introduces the theoretical rationale and practical skills needed to demonstrate basic proficiency in several of the following activities: minimal-impact camping, wilderness cooking, hiking, kayaking, canoeing, navigating with map and compass, outdoor safety, search and rescue, and group management. The major focus of this course will be the practical application of learned skills.
AR: attendance is required
CR: the former Environmental Studies 2210
OR: 3 hours of practicum per week
2201 Outdoor Pursuits - Winter introduces the theoretical rationale and practical skills needed to demonstrate basic proficiency in several of the following activities: navigating with map and compass, outdoor safety, search and rescue, group management, cross-country skiing, telemark skiing, downhill skiing, snowshoeing, winter camping, and winter survival techniques. The major focus of this course will be the practical application of learned skills.
AR: attendance is required
CR: the former Environmental Studies 2220
OR: 3 hours of practicum per week
3000 Human Dimensions of Resource Management explores how human attitudes and beliefs can be incorporated into resource and environmental management decisions and strategies. While this course will focus on the human aspects of resource and environmental management, it will also highlight the importance of integrating ecological dimensions into management efforts.
CR: Geography 3425
PR: ENSU 2001
3001 Application of Geographic Information Systems exposes students to the application of GIS in environmental and resource management through the use of real world, locally-relevant case studies. The topics cover spatial data acquisition, spatial data creation, spatial data interpolation, and simulation of the distribution of flow of mass, energy, goods, services, animals and people in a spatially-explicit manner. In addition to laboratory assignments, students will complete a major term project.
CR: the former Environmental Studies 3001, Geography 3260
LH: 3
PR: ENSU 2000
3100 Environmental Planning and Management has two simultaneous and complementary dimensions: planning and management. The "environment" in environmental planning and management plays out in two ways: inappropriate consumption, and appropriate site accommodation. In this course, we consider the broad context of environmental problems while focusing the planning toolkit on principles of sustainability. The course starts with a history of environmental contexts in North America, and then moves to the specifics of context. Case studies are widely employed.
CR: the former Sustainable Resource Management 3001
PR: ENSU 2001
3101 Analytical Approaches to Resource Management provides training in application of modelling approaches for entities ranging from single populations to interacting systems. These approaches will be used to understand population and ecosystem dynamics as well as harvester and market behaviour under various management scenarios.

[^12]LH: 3
PR: Biology 2600, ENSU 2001, Geography 3222 or 3 credit hours in statistics

4000 Integrated Approaches to Resource Management and Decision Analysis exposes students to approaches from natural and social sciences for natural resource management and decision making. Natural resource management involves decision making in a complex array of biophysical, social and economic environments consisting of the allocation of resources, formulation of policies, and manipulations of natural systems. The course presents methodological and practical aspects of planning and management using a case-based approach with regional, national and international perspectives.
PR: ENSU 3000 or permission of the Program Chair
4010 Seminar in Environment and Sustainability is a senior seminar in which selected environmental issues will be examined from several disciplinary perspectives.
CR: the former Environmental Studies 4010, the former Sustainable
Resource Management 4010
PR: ENSU 3000 or permission of the Program Chair
4100 Remote Sensing discusses the physical principles on which remote sensing is based and the types of measurements being made Understanding how remote sensors work at the conceptual level is the key to understanding the type of information that can be obtained. The topics covered include collection, manipulation and processing of remotely-sensed data, and the applications of these data in environmental and resource management
CR: Geography 3250, the former Sustainable Resource Management 4000
LH: 3
PR: ENSU 3001
4200 Contemporary Issues in Environmental Studies provides a detailed, comprehensive investigation of selected environmental problems that could include the following issues: risk assessment, indigenous peoples' perspectives on the environment, energy policy, water governance, parks planning \& management, political ecology, natural resource policy and administration, and environmental justice.
PR: ENSU 3000
4201 Environmental Assessment provides a thorough consideration of the environmental effects of a project and takes into account potential and probable impacts on the environment as well as people. Other areas of emphasis include cumulative impacts, socio-economic impacts, sustainability assessments, and Strategic Environmental Assessments of policies, plans, and programs.
CR: the former Environmental Studies 4000
PR: successful completion of 60 credit hours
4901-4910 Special Topics in Environment and Sustainability will have topics to be announced.
PR: enrollment in third or fourth year of the Bachelor of Environment and Sustainability Degree program

4950 Independent Research Project - Environmental Studies is a course that requires students to conduct independent research in environmental studies under the supervision of a faculty member. Students will prepare a major paper based upon their independent research.
CR: the former Environmental Studies 4950
PR: ENSU 3000, Geography 3222, Sociology 3040
4960 Independent Research Project - Resource Management is a course that requires students to conduct independent research in resource management under the supervision of a faculty members Students will prepare a major paper based upon their independent research.
CR: the former Sustainable Resource Management 4950
PR: ENSU 3000, ENSU 3101, Geography 3222

### 13.13 Environmental Science

Environmental Science courses are designated by ENVS.

### 13.13.1 Environmental Biology

3110 Taxonomy of Flowering Plants is a study of the biodiversity of flowering vascular plants (Magnoliophyta) through the practical identification of Newfoundland families, genera, and species. Related taxonomic and biogeographical principles will be stressed.
CR: Biology 3041
LH: 3 laboratory periods of integrated practice and theory
OR: Students must submit a collection of flowering plants identified to the species level. Detailed instructions should be obtained from the instructor in the spring/summer prior to the commencement of this course.
PR: Biology 2010 or equivalent; Science 1807 and Science 1808
3130 Freshwater Ecology is the study of freshwater ecosystems (lakes,
rivers, streams, peatlands). Included are abiotic components, community structures, energy flow, biogeochemical cycles, and the evolution of natural and altered aquatic ecosystems. Emphasis will be placed on field and laboratory studies of the ecology of freshwater organisms and systems in western Newfoundland.
LH: 3
PR: Biology 2010, Biology 2122, Biology 2600; one of Chemistry 1001 or the former Chemistry 1011; Science 1807 and Science 1808

3131 Impacted Terrestrial Ecosystems is an examination of ecological and evolutionary responses by organisms in terrestrial ecosystems to human-derived and natural perturbations. Advanced conceptual, empirical and experimental approaches will be used, with an emphasis on sampling local habitats.
CR: Biology 3610
LH: 3
PR: Biology 2600; and two of Biology 2010, Biology 2122, Biology 2210 or the permission of the instructor and Program Chair; Science 1807 and Science 1808

4132 Analytical Ecology states that the assessment of environmental impacts on higher-level ecological systems requires a critical analysis of scientific reports, along with the ability to evaluate ecological terminology and concepts and associated statistical methodologies. Students in this course will critically read and analyse recent scientific literature in Environmental Biology, with selected topics at the community, ecosystem and landscape level, and examine related univariate and multivariate statistical procedures
LH: three-hour laboratory/discussion group
PR: Biology 2600, Statistics 2550 (or equivalent), and 6 credit hours selected from Environment and Sustainability 2000 or the former Environmental Studies 2000, ENVS 2261, 2360, 2370, 2371, 2430, $2450,3072,3470$. It is recommended that students complete at least 80 credit hours before registering for this course.
4133 Conservation Biology will bring together the principles of ecology and conservation Biology at an advanced level. Current issues and techniques will be discussed with an aim towards understanding how populations of native flora and fauna can be managed for long-term conservation in the face of habitat degradation and loss.
CR: Biology 4650 and Geography 4650
LH: three-hour laboratory/discussion group
PR: two of ENVS 3110, 3130, and 3131; or permission of instructor; Science 1807 and Science 1808
4140 Environmental Science Field Course is a course providing practical experience in the observation, collection, identification and quantification of organisms and the various environmental parameters which affect them in pristine and disturbed habitats. Combinations of freshwater, marine and terrestrial habitats will be studied using techniques from various scientific disciplines. The actual combination of habitats, organisms, and techniques will vary from year to year.
PR: Biology 2600, Statistics 2550, with a minimum of 80 credit hours from Environmental Science Program (or equivalent) and permission of the instructor and Program Chair; Science 1807 and Science 1808

### 13.13.2 Environmental Chemistry

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the appropriate Dean of the School.
2261 Survey of Environmental Chemistry is an introduction to environmental problems, underlying chemistry and approaches to pollution prevention. Stratospheric chemistry and the ozone layer. Ground level air pollution. Global warming and the Greenhouse Effect. Toxic organic chemicals (TOCs), including herbicides, pesticides. Toxicology of PCBs, dioxins and furans. Chemistry of natural waters. Bioaccumulation of heavy metals. Energy production and its impact on the environment, including nuclear energy, fossil fuels, hydrogen.
PR: Chemistry 1001 or the former 1031 or Chemistry 1051 or Chemistry 2440 or the permission of the instructor and Program Chair

3210 Environmental Analytical Chemistry I is treatment of data, error analysis, wet methods of analysis of laboratory and field samples. Volumetric methods for acidity, alkalinity and hardness; chemical and biological oxygen demand (COD and BOD). Gravimetric methods for sulphate and phosphates. Theory and application of specific ion electrodes analysis of metal ions, dissolved gases and halide ions. Turbidimetric and nephelometric measures of water quality. Spectrophotometric analysis of trace metal ions.
LC: not more than seven hours per week
LH: not more than seven hours per week
PR: the former Chemistry 2300 (or 2301) and Chemistry 2210; Science 1807 and Science 1808
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

3211 Environmental Analytical Chemistry II is theory and application of spectroscopic methods of analysis (including error analysis) of environmentally important compounds. Spectrophotometric, FTIR, light scattering, chromatographic (GC, GC/MS, HPLC), fluorescence, phosphorescence, atomic absorption and electroanalytical methods will be studied. Synthetic laboratory samples and field samples will be examined by these techniques.
LC: not more than seven hours per week
LH: not more than seven hours per week
PR: ENVS 3210 (or equivalent); Science 1807 and Science 1808
3260 Industrial Chemistry is chemical principles used in the manufacture of inorganic and organic chemical products; electrochemical, petrochemical, polymer, pulp and paper, agricultural, cement, cosmetics, detergent and paint industries. Processes, specific pollutants of current interest: inorganic (e.g. mercury, nitrogen oxides and sulfur oxides gases, lead etc.) and organic (e.g. PCBs, chlorinated hydrocarbons, freons, pesticides/ herbicides). Industrial sources and analytical methods of detection will be studied.
PR: Chemistry 2210, Chemistry 2401, and ENVS 2261 (ENVS 2261 may be taken concurrently) or permission of the instructor and Program Chair

3261 Atmospheric Chemistry (same as Chemistry 3261) provides a comprehensive study of the chemistry of the Earth's atmosphere. Beginning with an overview of planetary atmospheres, we follow the evolution of the Earth's atmosphere until today. Atmospheric chemical processes are interpreted from the perspectives of chemical kinetics, chemical thermodynamics, molecular orbital theory, and molecular spectroscopy. The mechanisms of stratospheric reactions are studied in the context of the ozone layer, while those of the troposphere are linked to the so-called 'greenhouse effect' and aspects of pollution. The very different upperatmosphere chemistry is also studied.
CR: Chemistry 3261
PR: Chemistry 2210, Chemistry 2301 or permission of the instructor and Program Chair

4230 Aquatic Chemistry I is thermodynamics and kinetics of model systems. Acids and bases (including buffer intensity and neutralizing capacity), dissolved gases, precipitation and dissolution. Metal ions in aqueous solution. Redox control in natural waters. Pourbaix diagrams. Regulation of chemical composition of natural waters, pollution and water quality.
LC: not more than seven hours per week
LH: not more than seven hours per week
PR: ENVS 3211 and one of Chemistry 2400 or Chemistry 2440 or permission of the instructor and Program Charr Science 1807 Science 1808

## 4239 Aquatic Chemistry II - inactive course.

4240 Organic Chemistry of Biomolecules is structure and properties of carbohydrates, proteins, lipids, steroids, DNA and RNA. The chemistry of the cell in relation to its toxicology; effects of bioactive agents on cells, organelles, tissues and whole organisms. Natural products including those from the rain forest and marine environments. The role of metal ions in biomolecules. Examples of biosynthesis. Chemistry and mechanisms of mutagenesis and carcinogenesis.
PR: Chemistry 2401 or Chemistry 2440 or permission of the instructor and Program Chair
4249 Environmental Organic Chemistry focuses on anthropogenic sources of organic chemicals and pollutants in the environment. Concepts of organic chemistry (synthesis, structure, physical properties, chirality, industrial organic processes), biological chemistry (enzymes, oxidative pathways) and physical chemistry (equilibria, partitioning) extended and applied to mass transport through soil, water and air. Kinetics and mechanisms of chemical, photochemical and biological degradation and conversion of organics. Structure-reactivity relationships for organic chemicals and degradation intermediates in the environment.
CR: Chemistry 4620
PR: ENVS 4240, ENVS 3261, ENVS 4230 or the permission of the instructor and Program Chair

### 13.13.3 Other Envîronmental Science

1000 Introduction to Environmental Science is an introduction to the study of the environment. Environmental principles, issues and problems will be described and placed in a historical and societal context.

2000 Sampling Methods in Environmental Science introduces students to common field and laboratory techniques and monitoring practices in environmental science, in an interdisciplinary manner. The importance of field sampling and equipment used in field and laboratory for environmental monitoring of aquatic and terrestrial systems will be the main focus, incorporating aspects of biology, chemistry and earth science. Modules will be a mixture of field work, laboratory work, and lectures.
PR: Science 1807 and Science 1808; and two of Biology 1002, Chemistry 1001, Earth Sciences 1000; or permission of Chair

2360 Geological Hazards and Natural Disasters will introduce students to the geological aspects of the natural environment and the impacts that natural geological processes and phenomena may have on humanity. The impact of geological hazards and natural disasters on human society and behaviour will be examined through case studies.
CR: Earth Sciences 2916
PR: 15 credit hours or more
2369 Introduction to Soils provides a broad background knowledge about soils. Topics covered include: the origin of soils; physical, biochemical, and engineering aspects of soils; influence on humans and their food production; soil pollution and degradation; and management and conservation of soils.
PR: Earth Sciences 1000 or the former Geography 1000
2370 Global Environmental Change is a survey of the Earth as a dynamic system. Discussion of interacting cycles that define the Earth's environment. Material cycles and energy concepts. Evolution of the atmosphere in response to lithospheric, biospheric and hydrospheric changes. Major global environmental changes from Earth's formation to present. Emphasis on selfregulating ability of the Earth system.
PR: 30 credit hours or more
2371 Oceanography is historical review of science of oceanography. Earth and Earth systems (including plate tectonics). Marine sediments and sedimentary environments. Chemical and physical properties of seawater. The atmosphere and the oceans, ocean circulation. Waves and tides, coastal environments, distribution of organisms. Applied oceanography.
PR: 30 credit hours or more
2430 Energy and the Environment considers energy, energy conversion, heat transfer, the laws of thermodynamics, nuclear processes and radiation. Practical problems such as the energy shortage, human influences on climate, resource extraction, nuclear power etc. will be discussed.
PR: Mathematics 1081 or Mathematics 1000; Physics 1021 or co-requisite Physics 1051
2450 Meteorology is an application of physics and mathematics to the study of the atmosphere. Atmospheric motion on the global, synoptic, mesoand micro-scales. An introduction to atmospheric radiation and thermodynamics, clouds and precipitation. Vertical soundings and the analysis and interpretation of surface and upper-air weather maps.
CO: Physics 1051 or prerequisite Physics 1021
PR: Physics 1021 or co-requisite Physics 1051
3000 Principles of Environmental Toxicology introduces students to the field of toxicology through the understanding of processes that include absorption, distribution, metabolism, and excretion of toxic substances; and provides an overview of the history and development of ecotoxicology. An emphasis is placed on contemporary examples of toxic substances and their effects on biological systems and the environment.
CR: ENVS 4240
PR: Biology 1002, Chemistry 2401 or Chemistry 2440, and ENVS 2000
3072 Comparative Marine Environments will investigate the physical, chemical, geological and biological characteristics of the major marine environments from the coastal zone to the abyss and from the equator to the poles. The objective of the course will be an integrated study of the parameters that define the various environments. Emphasis will be placed on the interaction of organism and environment. The influence of the environment on the form, function and behaviour or organisms and the influence of the organism in modification of the physical environment will be stressed.
PR: ENVS 2371
3470 Transport Phenomena is fundamentals of fluid flow. Conservation laws for mass, momentum, and energy. Dimensional analysis. Turbulence. Confined fluid flows. Fundamentals of heat transfer. Conduction, convention, and radiation. Diffusion, dispersion, and osmosis. Applications to transport of pollutants at the microscopic and macroscopic scale.
PR: Mathematics 1001, Physics 1020 and Physics 1021 or Physics 1050 and Physics 1051

4000 Environmental Science Seminar reviews current topics in environmental science and discusses in a seminar format. Seminars will be presented on current research and environmental issues by faculty, students and guest speakers from universities, government and industry.
PR: Environmental Science students who have completed 80 credit hours or more, to include Biology 2600, Statistics 2550 and one of Chemistry 2440, Chemistry 2401, Chemistry 2210, or the former Chemistry 2300 (or 2301).
4069 Fundamentals of Soil Systems is the physics, chemistry and Biology of soil, including inorganic soil components, chemistry of organic soil matter, soil equilibria, sorption phenomena on soils, ion exchange processes, kinetics of soil processes, redox chemistry of soils, soil acidity, saline and sodic soils, organic pollutants, trace and toxic elements in soils, soil organisms, organic matter cycling, nutrient cycling and fertility, soil conservation and sustainable agriculture.
LC: not more than six hours per week
LH: not more than six hours per week. The laboratory will cover a number
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
of key physical, chemical and biological properties and procedures used in soil analyses. One or more field trips will be scheduled during laboratory sessions
PR: Biology 2600, Earth Sciences 1000, one of Chemistry 2210, the former Chemistry 2300, Chemistry 2301, Chemistry 2401, or Chemistry 2440, and 6 credit hours selected from Environment and Sustainability 2000 or the former Environmental Studies 2000, ENVS 2261, 2360, 2370, 2371, 2430, 2450, 3072, 3470. It is recommended that students complete at least 80 credit hours before registering for this course; Science 1807 and Science 1808.

4131 Environmental Restoration and Waste Management focuses on procedures aimed at restoring and rehabilitating ecosystems, with an examination of the interdisciplinary scientific basis underlying these procedures. The efficacy of management options, e.g. biomanipulation, microbial degradation and chemical treatments, involved in restoration and waste management will be evaluated. Applications and practical case studies of both aquatic and terrestrial ecosystems will be covered

PR: Biology 2600, one of Chemistry 2210, the former Chemistry 2300, Chemistry 2301, Chemistry 2401, or Chemistry 2440, and 6 credit hours selected from Environment and Sustainability 2000 or the former Environmental Studies 2000, ENVS 2261, 2360, 2370, 2371, $2430,2450,3072,3470$. It is recommended that students complete a least 80 credit hours before registering for this course.

4369 Environmental Hydrology provides quantitative and qualitative study of hydrological processes and functions under different environments. It explores natural and anthropogenic impacts on quality, quantity and distribution of water in different environments. Thus. the students will develop a balanced view of the hydrological processes and functions, will be able to understand the basic tenets of water cycle modeling and will be equipped to recognize the role and impact of water management on complex natural phenomena.
PR: Biology 2600, ENVS 2369, one of Chemistry 2210, Chemistry 2301, Chemistry 2401, or Chemistry 2440, and 3 credit hours selected from Environment and Sustainability 2000 or the former Environmental Studies 2000, ENVS 2261, 2360, 2370, 2371, 2430, 3072 or the permission of the instructor and the Program Chair. It is recommended that students complete at least 75 credit hours before registering for this course.

4479 Groundwater Flow is groundwater in the hydrologic cycle. Principles of fluid flow through permeable media. Hydraulic properties of soil and rock formations. Groundwater at the local and regional scale. The unit basin model. Groundwater as a transport agent of chemicals and microbes. Groundwater resources, reservoir characterisation, and quality assessment. Groundwater contamination.

CR: Earth Sciences 3610, the former 4610
PR: ENVS 3470 or the permission of the instructor and Program Chair
4910-4930 Special Topics in Environmental Science are special topics courses in Environmental Science normally taken by students beyond the second year.

4950 Research Project in Environmental Science is a course, with the guidance of a faculty member, where students will conduct a scientific study based upon original research or a critical review of extant data in an appropriate area. Students are required to submit a report and give a presentation.
PR: permission of Program Chair; Science 1807 and Science 1808
4951 Honours Project in Environmental Science I is a course, under the guidance of a designated supervisor (or supervisors), where the student will prepare a thesis proposal including a comprehensive literature review of the subject of their Honours thesis. Students will present the results of their work in both written and oral form.

PR: restricted to Environmental Science students who have been accepted into the Honours option; Science 1807 and Science 1808
4959 Honours Research Project in Environmental Science II is a continuation of ENVS 4951 specifically for Honours students. Under the supervision of faculty member(s), students will carry out an original research project in environmental science. Students will present both a thesis and seminar on their research
PR: ENVS 4951 and admission to the honours program; Science 1807 and Science 1808

### 13.14 Folklore

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, contact the appropriate Dean of the School.
Folklore 1000 is the prerequisite for all other courses in Folklore, except Folklore 1050, Folklore 1060 and those courses cross-
listed with other subject areas.
Folklore courses are designated by FOLK.
1000 Introduction to Folklore explores the role of tradition in communication, art and society. Reading assignments and audiovisual material will emphasize the use of folklore in context. Students will analyse traditions in their own lives through special assignments.
CR: the former FOLK 2000

## 1050 Folklore Studies - inactive course

2100 Folklore Research Methods - An Introduction is designed to provide the basic introduction to the research resources, tools and methods regularly employed in the area of Folklore. On the one hand, the course will examine what types of Library and Archive resources can be useful to the folklorist and, on the other hand, it will explore how folklorists in fieldwork situations should handle people, and how they can capture for posterity a record of the interviews that they have conducted and the events that they have observed. It is strongly recommended that majors and minors take this course before taking 3000 and 4000 level courses.
2230 Newfoundland Society and Culture (same as Sociology/ Anthropology 2230) is the Sociology and Anthropology of the Island of Newfoundland. The focus is on social and cultural aspects of contemporary island Newfoundland.
CR: Sociology/Anthropology 2230
UL: not applicable towards the Major or Minor in Anthropology
2300 Newfoundland Foiklore (same as Anthropology 2300) is survey of the various types of Folklore: tale, song, rhyme, riddle, proverb, belief, custom, childlore and others, with stress on their function in the Newfoundland community culture. Individual collection and analysis of materials from the students' home communities, supplemented by data from the this University's Folklore and Language Archive.

CR: Anthropology 2300 and the former FOLK 3420
PR: FOLK 1000 or Anthropology 1031
UL: not applicable towards the Major or Minor in Anthropology
2401 Folklife Studies is an examination of the traditional cultures of Europe and North America with special reference to Newfoundland. A selection of the following areas will be covered: settlement patterns, architecture, work and leisure patterns in the folk community, calendar customs, rites of passage, folk religion, folk medicine, language and folk culture, folk costume, foodways and folk art

## CR: the former FOLK 3500

2500 Folk Literature (same as Anthropology 2500) is an examination of the major genres of folk literature: folk narrative, folk poetry and song, folk drama, and the traditional generic forms within folk speech. An introduction to the textual, comparative and contextual methods of analysis. The literature discussed will be international in scope.
CR: Anthropology 2500 and any of the former FOLK 3400, English 3400, Sociology/Anthropology 3400
PR: FOLK 1000 or Anthropology 1031
2600 Regional Folklore - inactive course.
3130 Greek and Roman Mythology (same as Classics 3130) is a comparative study of specific myths and folktales of Greece and Rome as embodied in the literary and artistic remains of the ancient world with reference to their origins and their influence on later art and literature.
CR: Classics 3130
3200 Folksong is an introduction to the full range of traditional verse, song and music. Stress primarily on the songs of Canada, the United States and the British Isles, with attention to Newfoundland parallels. Examination of traditional vocal and instrumental styles as well as verse forms. Some reference to non-Western musical traditions. A knowledge of music is not a prerequisite.
CR: the former FOLK 2430
3300 Folk Drama is a survey of the main forms of traditional drama found in Great Britain and North America with reference to related European and non-western traditions. The origins, history and regional variations of these forms will be considered together with questions of social function, performance and aesthetics. The history of research in the area of folk drama will be examined along with related methodological and theoretical issues.

3450 Language and Play is an examination of such forms as the rhyme, riddle, proverb and proverbial saying, game, etc. Emphasis on problems of function and classification. Material will be chiefly from the British and North American traditions. Collecting will be encouraged.

3601-3620 Special Topic in Folklore will have topics to be studied announced by the School.

3850 Material Culture (same as Archaeology 3850) is an introduction to the study of material culture and the question of why objects are important to us. Using folklore and interdisciplinary approaches, we will look at objects as
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
cultural products, question the influence of objects on behaviours, and address the role of objects in historical and ethnographic research.
CR: Archaeology 3850
3920 Folklore, Education and Community is intended to familiarize students with the function of Folklore in the educational process. Emphasis will be on cultural transmission, cultural learning and child training practices (including mechanisms of social control.) The relationship of formal to informal education will be examined with particular reference to Newfoundland.
CR: the former FOLK 3030 or the former FOLK 4475
3930 Folklore and Popular Culture is an introduction to the study of popular culture, the folk/popular continuum, and the role of folklore in media such as film, television, music, and art.
CR: the former FOLK 2400
4300 Folklore of Canada is an examination of a variety of Canadian folklore from historical, geographical and cultural perspectives. Emphasis will be placed upon the application of theories of Canadian culture to folklore studies. Questions of the role of folklore and folklife with respect to identity, ethnicity, multiculturalism, national literature, regionalism and similar issues will be considered.
CR: the former FOLK 1020
4440 Music and Culture (same as Anthropology 4440, Music 4040, the former Music 4440) is traditional music as an aspect of human behaviour in Western and non-European cultures. Examination of the functions and uses of music; folk-popular-art music distinctions; and the relation of style to content. Outside reading, class exercises and individual reports will be required.
CR: Anthropology 4440, Music 4040, the former Music 4440
UL: not applicable towards the Major or Minor in Anthropology
4480 Oral History (same as History 4480) examines the narratives of everyday people who tell their life experiences. This course focuses on the collection and analysis of oral narratives and how they can be used to illuminate the past. It considers the power of these narratives to shape constructions of the present and future for both narrators and audiences.
CR: History 4480

### 13.15 French

Three consecutive credit courses in French language are available at the first-year university level, providing a complete overview of basic oral and written French. New students may choose to register initially in French 1500 or 1501; a diagnostic test is offered to assist students with initial course selection or to confirm that initial course selection is appropriate. Students with a limited background in French should register for French 1500 and continue with 1501. Students with a strong background in highschool French should bypass 1500 and begin their university study with 1501, especially if they intend to proceed beyond the first-year level. Very well prepared students may apply to the School for permission to enter 1502 directly. Bypassing one of more of these courses may enable students to include a larger number of advanced electives in their degree program. French 1500, 1501 and 1502 require three hours of instruction per week and two additional hours of language laboratory work or conversation class, or both.
French courses are designated by FREN.
1500 Introduction à la langue française, niveau universitaire I cours pour débutants et pour ceux don't les connaissances du français sont très faibles. La permission de s'inscrire à ce cours ne sera pas accordée à ceux qui ont complété le Francais 3202 (Immersion française au High School). Voir ci-dessus la note.
CR: I'autre des cours Français 1010 et 1011 (désormais supprimés)
1500 Introductory University French I is a course for beginners and for students whose background in French is very weak. Permission to register for this course will not be given to students who have completed Français 3202 (High School French immersion). See Note above.
CR: the former FREN 1010 or 1011
1501 Introduction à la langue française, niveau universitaire II Voir cidessus la note.
CR: et Français 1050 (désormais supprimé)
PR: High School French 3200 ou permission du chef du département. Les étudiants qui ont complété un programme d'immersion devraient consulter le chef du département avant de s'inscrire a ce cours.

1501 Introductory University French II See Note above
CR: the former FREN 1050
PR: High School French 3200 or permission of the Head of the department. Ex-immersion students should consult the Head of the

Department before registering for this course.
1502 Introduction à la langue française, niveau universitaire III Voir cidessus la note.
CR: et Français 1051 (désormais supprimé)
PR: 1501, ou la permission du chef de la division

## 1502 Introductory University French III See Note above.

CR: the former FREN 1051
PR: 1501, or by permission of the Dean of the School
2100 Français intermédiaire I rédaction, grammaire et pratique orale. PR: Français 1502
2100 Intermediate French I is composition, grammar and practice in oral skills.
PR: FREN 1502
2101 Français intermédiaire II continuation du travail de rédaction, de grammaire et de communication orale.
PR: Français 2100
2101 Intermediate French II is further work in composition, grammar and oral skills.
PR: FREN 2100
2300 Phonétique introduction pratique à la phonétique dú français. Emploi des symboles de l'alphabet phonétique, transcription phonétique et phonétique corrective.
PR: Français 1502 ou equivalent
2300 Phonetics is a practical introduction to French phonetics, including the International Phonetic Alphabet and phonetic transcription as well as corrective phonetics.
PR: FREN 1502 or equivalent
2601 Apprentissage de la lecture les étudiants exploreront des stratégies de lecture qui faciliteront la compréhension de textes divers. Ce cours sera normalement enseigné en français.
CR: Les étudiants ayant complété Français 2550 peuvent suivre Français 2601 ou Français 2602, mais pas les deux. Les étudiants ayant complété Français 2551 peuvent suivre Français 2601 ouFrançais 2602, mais pas les deux. Les étudiants ayant complété Français 2550 et Français 2551 ne peuvent suivre ni Français 2601 ni Français
2602.

PR: Français 1502 ou Français 2159, ou équivalent
2601 Reading Skills will explore reading strategies in a variety of texts in French. This course will normally be taught in French.
CR: Students who have successfully completed FREN 2550 may take either FREN 2601 or FREN 2602, but not both. Students who have successfully completed FREN 2551 may take either FREN 2601 or
FREN 2602, but not both. Students who have completed both FREN 2550 and FREN 2551 may not take either FREN 2601 or FREN 2602. PR: FREN 1502, or FREN 2159 or equivalent
2602 Lecture de textes intégraux les étudiants exploreront des stratégies de lecture qui faciliteront la compréhension de textes intégraux. Ce cours sera normalement enseigné en français.
CR: Les étudiants ayant complété Français 2550 peuvent suivre Françias 2601 ou Français 2602, mais pas les deux. Les étudiants ayant complété Français 2551 peuvent suivre Français 2601 OU Français 2602, mais pas les deux. Les étudiants ayant complété Français 2550 et Français 2551 ne peuvent suivre ni Français 2601 ni Français 2602.

PR: Français 1502, ou Français 2159 ou équivalent
2602 Reading Complete Texts will explore reading strategies in a variety of complete texts in French. This course will normally be taught in French.
CR: Students who have successfully completed FREN 2550 may take either FREN 2601 or FREN 2602, but not both. Students who have successfully completed FREN 2551 may take either FREN 2601 or FREN 2602, but not both. Students who have completed both FREN 2550 and FREN 2551 may not take either FREN 2601 or FREN 2602.
PR: FREN 1502, or FREN 2159 or equivalent
2900 A Survey of Francophone Cultures places emphasis on oral comprehension and expression. This course is a prerequisite for FREN 3650-3651-3653.
CR: the former FREN 2500
PR: FREN 1502 or equivalent. Students who have obtained less than 70\% in FREN 1051 are, however, advised to complete FREN 2100 before attempting this course

2900 Survol des cultures francophones met l'accent mis sur la compréhension et l'expression orales.
3100 Grammaire et analyse de textes révision des catégories nominale et verbale du français (morphologie, nombre, genre, temps, aspect, mode, voix). Analyse grammaticale et stylistique des textes avec un accent particulier sur l'emploi du verbe en français. Travaux d'expansion lexicale.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: Français 2101 ou Français 2160 et au moins un autre cours de français de niveau 2000

3100 Grammar and Textual Analysis is revision of the French noun and verb systems (morphology, number, gender, tense, aspect, mood, voice). Grammatical and stylistic textual analysis with special emphasis on the use of verbs in French. Vocabulary enrichment.
PR: FREN 2101 and 9 additional credit hours in French at the second-year level, or permission of the Head of the Department

3101 Stylistique et analyse de textes rôle et fonction des parties du discours; exploitation sémantique (synonymie, polysémie); tropes et figures de style. Analyse grammaticale et stylistique de textes avec un accent particulier sur ces phénomènes. Travaux d'expansion lexicale.
PR: Français 2101 ou Français 2160 et au moins un autre cours de français de niveau 2000

3101 Stylistics and textual analysis is role and function of the parts of speech in French; semantic enrichment (synonymy, polysemy); tropes and figures of speech. Grammatical and stylistic textual analysis with special emphasis on these phenomena. Vocabulary enrichment.
PR: FREN 2101 or FREN 2160 and at least one other 2000-level course in French

### 13.16 Gender Studies

Gender Studies courses are designated by GNDR.
2000 An Interdisciplinary Introduction to Gender Studies (same as the former Women's Studies 2000) is an interdisciplinary introduction to the major concepts, issues and debates of Gender Studies.
CR: the former Women's Studies 2000
2001 Women and Science (same as the former Women's Studies 2001) is an investigation of: historical and contemporary contributions of women scientists, especially Canadians; different sciences and how they study women; and feminist and other perspectives on gender and science.
CR: the former Women's Studies 2001
3000-3010 Special Topics in Gender Studies (same as the former Women's Studies 3000-3010) has a range of special topics in Gender Studies.
CR: the former Women's Studies 3000-3010
4000 Contemporary Feminist Issues same as the former Women's Studies 4000) is an interdisciplinary seminar in Gender Studies that identifies emerging debates in contemporary feminism and analyses complex and contentious issues and how they intersect and disrupt social constructions of gender.
CR: the former Women's Studies 4000
OR: 3 hour seminar per week
PR: students must normally have completed GNDR 3005 or the former Women's Studies 3005 or GNDR 3025 and 15 credit hours in other courses applicable to the Gender Studies Major and Minor programs before taking GNDR 4000. In exceptional cases, students without these prerequisites may be accepted, with the approval of the instructor of GNDR 4000 and the Head of the Department.

### 13.17 Geography

Geography courses are designated by GEOG.
1050 Geographies of Global Change provides perspectives on the major geographical challenges and changes facing the contemporary globe, including: climate and environmental change, sustainability, human development, economic globalization, cultural change, and population and migration. Using the integrative skills of geographical analysis, the course prepares students for advanced study in geography and citizenship in the modern world.
CR: the former GEOG 1000, the former GEOG 1001, the former GEOG 1010, and the former GEOG 1011

2001 Cultural Geography is an introduction to the study of culture in geography, emphasizing both the history of the field from classic studies of landscapes to contemporary scholarship and themes of recent importance. These include the relationship between nature and culture: imperialism and colonialism; place, identity, and power; and global cultures of commodities, media, and tourism.
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011
2102 Physical Geography: The Global Perspective is a study of form, process, and change in natural systems at and near the surface of Earth, viewed as human environment. Emphasis is on global and regional scales in the systematics study of climate, water, landforms and vegetation.
LH: 3
PR: GEOG 1050, or the former GEOG 1000, or the former GEOG 1011
2195 Introduction to Geographical Information Sciences is an introduction to the fields of cartography, remote sensing, and geographic
information systems (GIS). Geographic information collection, representation and analysis methods are the topics for the course. An emphasis is given to the applications of maps and satellite images.
CR: ENSU 2000, the former Environmental Studies 2000
2302 Issues in Economic Geography are basic issues and ideas in economic geography. The development of a regional economy will be related to underlying economic, cultural and physical factors.
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011
2425 Natural Resources is an introduction to the concepts of natural resources, environment and conservation: the nature and distribution of natural resources; methods of use, allocation and development of natural resources and the role of various physical, social, economic, political and technological factors influencing decision-making about resources.
CR: the former 3325
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011

## 3222 Research Design and Quantitative Methods in Geography is an

 introduction to principles of research design, and to the use of quantitative techniques. This course provides students with a basic understanding of data collection, entry, and analysis and presentation skills most commonly used by geographers. Practical, computer-based exercises are an essential part of the course. It is strongly recommended that this course be completed before registration in a 4000-level geography course.CR: the former GEOG 2220
LH: 3
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 101 and at least 9 credit hours from GEOG 2001, GEOG 2102, GEOG 2195, GEOG 2302, GEOG 2425.
3350 Community and Regional Planning and Development introduces students to regional planning and development theories, techniques and approaches. Understanding of networks of development actors at community and regional scales, methods of delineating regions, links between theory and practice in planning and development. Focus on Canadian experiences and a sustainable development perspective.
PR: GEOG 2302 or permission of the instructor
3900-3909 Special Topics in Geography will have topics to be studied announced.
PR: permission of the instructor and the Head
4405 Outdoor Recreational Resources and Planning is an introduction to the major themes and techniques in the study of outdoor recreation. A theoretical framework will provide a base for the evaluation of the complex issues involved in managing a physical resource for recreational purposes. North American examples will be emphasized.
CR: GEOG 4909
LH: 3
PR: GEOG 2425 or the former GEOG 3325. It is strongly recommended
that GEOG 3222 and the former 3226 be completed before
registration in 4000 -level courses

### 13.18 History

With the exception of 4000-level cross-listed courses, students are required to take 12 credit hours in History (in addition to History $1100 / 1101$ ) or have permission of the Chair of the Historical Studies Program before enrolling in any 4000-level History course.
History courses are designated by HIST.
1100 Introduction to History is an introduction to the study and writing of history which will emphasize the concepts of history through a thematic approach to the history of western civilization from ca. 1500 to ca. 1815. (Offered only at Grenfell Campus.)
CR: the former HIST 1000
1101 Introduction to History is an introduction to the study and writing of history which will emphasize the concepts of history through a combination of research and writing within a thematic approach to the history of western civilization from ca. 1815 to the present. (Offered only at Grenfell Campus.) Students in their first year normally take HIST 1100 and HIST 1101
CR: the former HIST 1001
2034 History of the Hellenistic World (same as Classics 2020) is a survey of the history of the Mediterranean world and the Near East from the death of Alexander the Great in 323 BC until the incorporation of the Kingdom of Egypt in the Roman Empire in 30 BC. Particular attention is given to the influence of the new monarchies on political, social and cultural developments in both Greek and non-Greek communities.
CR: same as Classics 2020
2035 History of Classical Greece (same as Classics 2035) is a survey of Greek history from the Bronze Age to the death of Alexander the Great, with special reference to the social and political institutions of the fifth century B.C.

CR: Classics 2035, HIST/Classics 2030 since 1985-86 or the former HIST/
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## Classics 3910

2040 History of Rome (same as Classics 2040) is a survey of Roman history from the early monarchy to the reign of Constantine, with special reference to society and politics in the late Republic and early Empire.
CR: Classics 2040, HIST/Classics 3920
2100 Empires of the North Atlantic, 1500-1820 will examine European expansion across the Atlantic to North America, the attempt to take possession of that continent through commercial investment and colonies, and the way in which European colonies were transformed into new societies.

2120 The History of Canadian-American Relations, 1783 to the Present is a survey of the major themes in the history of Canadian-American relations, from the American Revolution to the present. Emphasis will be placed on economic, social, political and cultural developments.
2200 Making Canada is a survey of Canadian History to Confederation, 1867.

2210 Modern Canada is survey of Canadian History since Confederation.
2300 Early Modern European History, 1500-1789 is an introduction to the main issues and problems in early modern European History with an emphasis on the political, social, economic and cultural developments from the sixteenth through the eighteenth century.

2310 Europe in the Nineteenth Century: 1789-1914 is a survey of the economic, social, political and cultural developments of Europe from 17891914.

2320 Medieval Europe to the Eleventh Century (same as Medieval Studies 2001) is a survey of the economic, social, political and cultural developments of the early Middle Ages.
CR: the former HIST 2030, Medieval Studies 2001
2330 Medieval Europe Since the Eleventh Century (same as Medieval Studies 2002) is a survey of the economic, social, political and cultural developments of Europe in the high and late Middle Ages.
CR: the former HIST 2030, Medieval Studies 2002
2500 The Twentieth Century I is a study of the world-wide impact of the main events and developments in the age of global interdependence. CR: the former HIST 3700

2510 Twentieth Century II is an historical analysis of the main issues in the contemporary world since 1945.
CR: the former HIST 3710
2540 Fascism and Resistance in the Twentieth Century will explore the history of fascism, and resistance to fascism, from its late nineteenth-century origins through the end of the Second World War.
2700 Art History Survey I (same as Visual Arts 2700) is the history of art from pre-historic times to the Renaissance
CR: Visual Arts 2700
2701 Art History Survey II (same as Visual Arts 2701) is the history of art from the Renaissance to the 20th century.
CR: Visual Arts 2701
3030 Environmental History examines the history of human relationships to the natural environment. The focus of the course is the history of environmental changes caused by humans, and the influence of the natural environment on human cultures and societies. Case studies will focus on issues with broad relevance to contemporary environmental issues such as energy use, the environmental impact of military conflict, species introductions, natural disasters, urban sustainability, ecological restoration, and the origins of environmentalism.
3050 History of Warfare to 1789 is a survey of major developments in the history of warfare from the earliest times to 1789 with particular emphasis on changes in the nature and conduct of warfare, the evolution of military thinking, the organization of military and naval forces, the impact of technological change, the emergence of professionalism and the relationship between societies and armed forces.
3060 History of Modern Warfare since 1789 is an examination of those major developments which have affected the nature and conduct of warfare in the period since 1789, with particular emphasis on the evolution of military thinking, the impact of technology on organization and planning, the role of air power, the civil-military relationship, professionalism in the armed forces, and the changing nature of warfare: the emergence of total war, global war, guerilla warfare, and limited warfare.
3090 Alexander and the Macedonians (same as Classics 3090) investigates the impact of the conquests of Alexander the Great and his Macedonian Successors on the political, social, cultural, intellectual, and religious world of the Mediterranean and Near East between Alexander's accession in 336 and the battle of Ipsus in 301, when his vast empire was
carved into Hellenistic kingdoms.
CR: Classics 3090
3110 History of Newfoundland to 1815 is the growth of settlement and the manner in which a `migratory' fishery carried on from England and Ireland changed into a `sedentary' fishery carried on by residents of Newfoundland.

3120 Modern Newfoundland Since 1815 is the establishment and development of political institutions, changes in economic structure and the growth of populations.

3135 France in the Americas: 1500-1815 investigates the French presence mainly in New France, but also Newfoundland, Florida, Louisiana, the Caribbean, Acadia, lle Royale, and Brazil, from the earliest voyages of exploration to the Anglo-French struggle for North America. This topic will be studied within the greater framework of the transplantation of a European society onto a different continent, delving also into various subject themes such as French-aboriginal relations, politics, and government, women and gender, and society in France and New France.
3250 Migration History of North America is a survey of migration to and within North America from the seventeenth to the twentieth century.

3320 Early Modern France, 1500-1789 is French History from 1500 to 1789, with a focus on such themes as the Renaissance, polifical and social change, gender history and the Enlightenment.
CO: 6 credit hours that have the initial digit ' 2 '
PR: 6 credit hours that have the initial digit ' 2 '
3330 France: 1750-1852 is the study of France from the decline of the Old Regime to the end of the Second Republic.

3440 History of the British Empire and Commonwealth since 1815 is the transition from British Empire to Commonwealth of Nations.

3445 Witchcraft and the Witch-Hunts in Early Modern Europe is a history of witchcraft, demonology, and witch-hunts from 1400 to 1750, focusing on such themes as gender, the body and medical knowledge, religious dissidence, and popular culture.

3450 British History: 1485-1714 is the emergence of Britain under the Tudors and early Stu
3460 British History Since 1714 is British History from the accession of the Hanoverians to the welfare state

3490 History of Ireland Since the Great Famine is a survey of Irish history from the mid-nineteenth century to the present.
CR: the former HIST 3470
3520 Aboriginal History to 1763 (same as Anthropology 3520 and Archaeology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment. CR: Anthropology 3520 and Archaeology 3520
3525 Aboriginal History from 1763 (same as Anthropology 3525 and Archaeology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.
CR: Anthropology 3525 and Archaeology 3525
3551 Tudors, Historical Memory, and Film focuses on the dialogue between past and present as it plays out in the various film and historical representations of the Tudor period.
3675 Navies and Societies Since 1650 is an examination of the rise of modern navies since 1650 that places navies and naval decisions within broader national and international political, economic and social contexts.
CR: the former HIST 3822
3700 Art History: The Italian Renaissance (same as Visual Arts 3700) is an overview of the art and architecture of Renaissance Italy with an emphasis upon the historical context in which art was produced.
CR: Visual Arts 3700
3701 Art History: The Renaissance Outside Italy (same as Visual Arts 3701) is the Renaissance outside Italy from the late Fourteenth century and the international style through the 16th century.
CR: Visual Arts 3701
3760 Women in Western Society and Culture is a survey of major developments in the history of women from the fifteenth through the eighteenth centuries. The major themes addressed are: cultural and religious assumptions about women; demographic changes; women's work roles; women's participation in religious and political movements.
3770 Women in Western Society and Culture (II) are selected themes in
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
the history of women in the modern period with a focus on cultural attitudes toward women, demographic trends affecting women, the impact of changing economic roles, and the development of feminism.
CR: the former HIST 3761
3840 Historical Methods is an introduction to the methods and practices of history in the modern era. This course is compulsory for Honours students and recommended for Majors, including those intending to apply for graduate studies. For Historical Studies students at Grenfell Campus this course is required for all majors and minors
CR: the former HIST 4801
PR: 12 credit hours in History including HIST 1100/1101 or permission of the instructor

4101 The Renaissance in Europe, 1400-1550 is a seminar on the Renaissance in Europe, particularly in Italy and northern Europe, focusing especially on its intellectual and cultural aspects but also the social and gender history of the topic.

4230 Special Topics in Newfoundland History I are specialized studies in the History of Newfoundland.

4231 Special Topics in Newfoundland History II are specialized studies in the History of Newfoundland.
CR: the former Political Science 4731
4254 Special Topics in Canadian History: A History of Social Welfare is a study of the broad theme of the state and social welfare in Canada. It examines the origins of modern forms of social control as evidenced in the nineteenth century prison, the lunatic asylum, and the poorhouse. As well, it compares Canadian and British and American social welfare institutions and policies, and traces their historical evolution into the twentieth century.
4320 Special Topics in European History: The British Empire, 1688 to the Present has a range of special topics.

4410-4430 (Excluding 4411, 4419, 4421) Historical Problems are specialized studies in historical problems.

4560-4570 Special Topics in Social and Intellectual History are specialized studies in social and intellectual history.
4730 Art History: Modern Art I (same as Visual Arts 4730) is an examination of the cultural, social, and political forces which, from 1750 to 1850, were to have a major impact on modernity and later modern art.
CR: Visual Arts 4730
PR: 6 credit hours in art history or permission of the chair of the Visual Arts Program

4731 Art History: Modern Art II (same as Visual Arts 4731) is an examination of the various cultural and social forces between 1850 and 1914 which shaped the rise of the Modern movement.
CO: 6 credit hours in art history or permission of the chair of the Visual Arts Program
CR: Visual Arts 4731
PR: 6 credit hours in art history or permission of the chair of the Visual Arts Program
4821 Reading Course is a directed reading course for Honours and selected students including those intending to apply for graduate studies. Readings will be taken from a list of significant works in History, the Humanities, and the Social Sciences.
PR: permission of the Program Chair
4950 Independent Project in Historical Studies will have students complete an independent research project under the supervision of a faculty member or members. Topics must have the approval of the Program Chair of History.
PR: HIST 3840 and nine other History courses

### 13.19 Human Kinetics and Recreation

Human Kinetics courses are designated by HKR.
3555 Outdoor Recreation Management is an overview of outdoor recreation practices in Newfoundland and Canada. This course will examine the management of resources, conservation education and practices, development for public use or exclusion; legislation related to management of risk; viability of facilities; national and provincial agencies; private commercial ventures; and future trends in management. Management strategies will form a major part of the course.
CR: the former RECR 3555 and the former PHSD 3550
UL: cannot be used as an elective towards the Environmental Studies
Major for Graduates of the Two-Year Adventure Tourism Diploma Program
3565 Tourism/Commercial Recreation will examine behavioural factors influencing tourism; promotion of commercial recreation attractions; provincial strategies in travel and tourism; problems of leisure travel; stability of entrepreneurial ventures in tourism; and research and planning strategies
relevant to commercial ventures
CR: Tourism 1000, the former Tourism 2201, the former RECR 3565 and the former PHSD 3560

4555 Leadership and Supervision in Recreation is need, selection, training and supervision of leaders in recreation. Certification, standards and professional organizations. Evaluation of leadership - materials and methods used. Practical exposure to roles of both leader and supervisor through seminar and related fieldwork.
CR: the former RECR 4555 and the former PHSD 4550
UL: cannot be used as an elective towards the Environmental Studies Major for Graduates of the Two-Year Adventure Tourism Diploma Program

4575 Recreation Ethics, Issues and Trends will explore contemporary trends and issues identified by governments and recreation practitioners and the way in which these issues influence the delivery of leisure services.
CR: the former RECR 4575 and the former PHSD 4570

### 13.20 Humanities

Humanities courses are designated by HUMN.
1001 Humanities and the Contemporary World is a study of the relevance of humanities disciplines and texts to contemporary cultural forms and practices such as movies, popular music, television, comic books, graphic novels, professional sports, etc. The course will also focus on the mastery of composition skills. The course is a designated writing (W) course.
1002 Texts That Changed the World is a study of humanities texts which have helped to shape Western Civilization. The course is a designated writing (W) course.
PR: HUMN 1001
2000 Texts that Changed the World II is a continuation of Humanities 1002. It focuses primarily on political thought from the renaissance through modern eras and examines how developments in the understanding of what it means to be human inform the social and political world. The course is a designated writing (W) course.
2001 The Ancient World is a study of major cultural developments and achievements in art, literature, religion, philosophy, and science in the ancient Mediterranean during the period 4000 BCE to 400 CE. The course explores the great ancient civilizations of the Near East, Greece, and Rome and their influence on the shaping of Western culture and society. The course is a designated writing (W) course.
PR: HUMN 1001 and 1002
2002 Thought and Society in the Medieval World this course examines the development of medieval civilization through the consideration of thought, art, spirituality and politics. Medieval culture will be examined largely through primary texts centered on a series of key themes and historical-cultural watersheds. These texts will be contained in a course pack designed for this course. The course is a designated writing (W) course.
PR: HUMN 1001 and 1002
2010 Themes in Humanities (Interdisciplinary Seminar) is a seminar course in which themes have common interest to the Humanities will be discussed from the perspective of the various disciplines. The course is a designated writing (W) course.
CR: the former HUMN 3000
PR: HUMN 1001 and 1002
3001 The Early Modern Period is a study of the major cultural developments and achievements in art, literature, religion, philosophy, and science in Western Europe during the period 1450-1650. The course is a designated writing (W) course.
PR: 9 credit hours in Humanities with at least 3 credit hours at the 2000level

3002 The Modern World examines emerging conceptions of the modern self and its expression in philosophy, science, political revolution and constitution, visual art and literature during the period 1650-1850. The course is a designated writing (W) course.
PR: 9 credit hours in Humanities with at least 3 credit hours at the 2000level

3010 The Nature of Interpretation introduces students to central concepts and debates concerning the sorts of interpretation that distinguish Humanities as a discipline. Students gain familiarity with contemporary and historical approaches. The course is a designated writing (W) course.
PR: 9 credit hours in Humanities with at least 3 credit hours at the 2000level

3020 Humanities and the Environment is an examination of the human understanding of the natural world from the perspectives of the literary arts, the visual arts, and music and religion. It is a designated writing (W) course.
PR: 9 credit hours in Humanities with at least 3 credit hours in at the 2000level

[^13]3021 East Meets West - Asian Traditions and the Humanities is an examination of the influence of Asian currents of thought in the West in literature, philosophy, the visual arts, music and popular culture. This is a designated writing (W) course.
PR: 9 credit hours in Humanities with at least 3 credit hours in at the 2000level

3100-3109 Special Topics has a range of special topics in Humanities.
PR: 9 credit hours in Humanities with at least 3 credit hours at the 2000level

4001 The Postmodern World is a study of major developments in the evolution of culture, thought, arts, science, and beliefs in the Western world from the nineteenth century to the present day. The course is a designated writing (W) course.
PR: 12 credit hours in Humanities with at least 3 credit hours at the 3000level

4010 Authors, Events, and Texts is a seminar course in which themes having common interest to the Humanities will be discussed from the perspectives of the various disciplines. This course focuses on close readings of its subject matter and is distinct from theme-oriented courses in Humanities. The course is a designated writing (W) course.
CR: the former HUMN 4000
PR: 24 credit hours in Humanities including HUMN 3010
4020-4029 Special Topics has a range of special topics in Humanities.
4950 Independent Project (Directed Research) will complete an independent research project under the supervision of a faculty member or members. Topics must have the approval of the Program Chair of Humanities.
PR: 24 credit hours in Humanities including HUMN 3010

### 13.21 Mathematics and Statistics

At most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit restrictions: Mathematics 1000, 1031, 1050, 1051, 1052, 1053, 1080, 1081, 1090, 109A/B, 1150, 1151. Students who have already obtained credit for 6 or more Mathematics credit hours numbered 2000 or above are not permitted to register for Mathematics 1052 or 1053, nor can they receive credit for either of these courses.

At Grenfell Campus, students who have completed high school mathematics may enter directly into Mathematics 1090, 1052, 1053. However, placement in more advanced first-year mathematics courses is based upon a student's pre-requisite level of proficiency in mathematics as demonstrated in a manner that is acceptable to the School of Science and the Environment. This may be through a combination of credit and grades earned in recognized high school or undergraduate mathematics courses or through scores earned in recognized, standardized examinations such as International Baccalaureate (IB), Advanced Placement (AP), or the College Board's Subject Area Test in Mathematics Level I (SATM1) examinations. Where a pre-requisite has not been met through one of these means, a student will be required to complete the University's Mathematics Placement Test (MPT) or the Calculus Placement Test (CPT). Students registering for first year mathematics courses online or through the St. John's Campus should consult the Faculty of Science, Course Descriptions, Mathematics for placement information.
Mathematics courses are designated by MATH and Statistics courses are designated by STAT.
1000 Calculus I is an introduction to differential calculus, including algebraic, trigonometric, exponential logarithmic, inverse trigonometric and hyperbolic functions. Applications include kinematics, related rates problems, curve sketching and optimization.
CR: the former MATH 1081
LH: 1.5
PR: MATH 1090 or 109B or a combination of placement test and high school Mathematics scores acceptable to the Department

1001 Calculus II is an introduction to integral calculus, including Riemann sums, techniques of integration and improper integrals. Applications include exponential growth and decay, area between curves and volumes of solids of revolution.
PR: MATH 1000 or the former MATH 1081
1052 Mathematics for Business covers topics which include elementary algebra and functions, sets, elementary probability, matrices, systems of equations, and linear programming.
CR: Math 1050 and Math 1051

LC: 4
UL: students who already have obtained credit for 6 or more Mathematics credit hours numbered 2000 or above are not permitted to register for this course, nor can they receive credit for it

1053 Classical Mathematics covers topics which include logic, permutations, combinations, mathematical systems, elementary number theory, and geometry.
CR: Math 1050 and Math 1051
LC: 4
UL: students who already have obtained credit for 6 or more Mathematics credit hours numbered 2000 or above are not permitted to register for this course, nor can they receive credit for it

1090 Algebra and Trigonometry provides students with the essentia prerequisite elements for the study of an introductory course in calculus. Topics include algebra, functions and their graphs, exponential and logarithmic functions, trigonometry, polynomials, and rational functions.
CR: if previously completed or currently registered for MATH 1000, MATH 1001, 109A/B, the former 1080, or the former 1081

## LH: 3

PR: a combination of placement test and high school Mathematics scores acceptable to the Department or the former MATH 104F

2000 Calculus III is an introduction to infinite sequences and series, and to the differential and integral calculus of multivariate functions. Topics include tests for the convergence of infinite series, power series, Taylor and Maclaurin series, complex numbers including Euler's formula, partial differentiation, and double integrals in Cartesian and polar coordinates.
LH: 1.5
PR: MATH 1001
2050 Linear Algebra I includes the topics of Euclidean n-space, vector operations in 2 - and 3-space, complex numbers, linear transformations on n space, matrices, determinants, and systems of linear equations.
PR: A combination of placement test and high school Mathematics scores acceptable to the Department or 3 credit hours in first year Mathematics courses.
2051 Linear Algebra II includes the topics of real and complex vector spaces, basis, dimension, change of basis, eigenvectors, inner products, and diagonalization of Hermitian matrices.
PR: MATH 1000 and MATH 2050
2090 Mathematics of Finance covers the following topics: simple and compound interest and discount, forces of interest and discount, equations of value, annuities and perpetuities, amortization schedules and sinking funds, bonds and other securities, contingent payments.
PR: MATH 1001
2130 Technical Writing in Mathematics is a project oriented course combining mathematical investigation and technical writing. By using computer programming, graphical and typesetting tools, students will explore mathematical concepts and will produce technical reports of professional quality. The latter will combine elements of writing and graphics to convey technical ideas in a clear and concise manner.
PR: MATH 1001 and Computer Science 1510 the former 1710 or the
former 2710 or the former 2602 or Engineering 1020 or permission of the Chair of Computational Mathematics

2260 Ordinary Differential Equations I (same as the former MATH 3260) is direction fields, equations of first order and first degree, higher order linear equations, variation of parameters, methods of undetermined coefficients, Laplace transforms, systems of differential equations. Applications include vibratory motion, satellite and rocket motion, pursuit problems, population models and chemical kinetics.
CR: the former MATH 3260 or the former Engineering 3411
PR: MATH 2000
2320 Discrete Mathematics covers basic concepts of mathematical reasoning: logic and quantifiers, methods of proof, sets and set operations, functions and relations, equivalence relations and partial orders, countable and uncountable sets. These concepts will be illustrated through the congruence and divisibility of integers, induction and recursion, principles of counting, permutations and combinations, the Binomial Theorem, and elementary probability.
CR: the former Computer Science 2740 or the former Engineering 3422 or Engineering 4424
PR: MATH 1001 or MATH 2050
2330 Euclidean Geometry is an introduction to Euclidean geometry of the plane. It covers the geometry of triangles and circles, including results such as the Euler line, the nine-point circle and Ceva's theorem. It also includes straight-edge and compass constructions, isometries of the plane, the three reflections theorem, and inversions on circles.
CR: the former MATH 3330
PR: MATH 2051 or 2320
2500 Statistics for Business and Arts Students is descriptive statistics (including histograms, stem-and-leaf plots and box plots), elementary
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
probability, random variables, the binomial distribution, the normal distribution, sampling distribution, estimation and hypothesis testing including both one and two sample tests, paired comparisons, correlation and regression, related applications.
CR: STAT 2550, the former STAT 2510, Psychology 2910, Psychology 2925 and the former Psychology 2900
LH: 1.5
PR: MATH 1000 or MATH 1052 or 6 credit hours in first year courses in Mathematics or registration in at least semester 3 of a Bachelor of Nursing program or permission of the Head of Department.

2550 Statistics for Science Students is an introduction to basic statistics methods with an emphasis on applications to the sciences. Material includes descriptive statistics, elementary probability, binomial distribution, Poisson distribution, normal distribution, sampling distribution, estimation and hypothesis testing (both one and two sample cases), chi-square test, one way analysis of variance, correlation and simple linear regression.
CR: Engineering 4421, STAT 2500, the former STAT 2510, Psychology 2910, Psychology 2925 and the former Psychology 2900.
LH: 1.5
OR: Statistical computer package will be used in the laboratory, but no prior computing experience is assumed
PR: MATH 1000 or the former MATH 1081
3000 Real Analysis I covers the structure of the real numbers, sequences and limits, compactness, continuity, uniform continuity, differentiation, and the Mean Value Theorem.
CR: the former MATH 2001
LH: 1.5
PR: MATH 2000 and 2320
3132 Numerical Analysis I includes a discussion of round-off error, the solution of linear systems, iterative methods for nonlinear equations, interpolation and polynomial approximation, least squares approximation, fast Fourier transform, numerical differentiation and integration, and numerical methods for initial value problems.
CR: Computer Science 3731
LH: 1.5
PR: MATH 2000, MATH 2050, and Computer Science 1510 or the former 1710 or the former 2710 or the former 2602 or Engineering 1020 or permission of the Chair of Computational Mathematics

3202 Vector Calculus deals with functions of several variables. Lagrange multipliers, vector valued functions, directional derivatives, gradient, divergence, curl, transformations, Jacobians, inverse and implicit function theorems, multiple integration including change of variables using polar, cylindrical and spherical co-ordinates, Green's theorem. Stokes' theorem, divergence theorem, line integrals, arc length.
CR: Physics 3810
PR: MATH 2000 and MATH 2050
3240 Applied Graph Theory examines algorithms and complexity, definitions and basic properties of graphs, Eulerian and Hamiltônian chains, shortest path problems, graph colouring, planarity, trees, network flows, with emphasis on applications including schedúling problems, tournaments, and facilities design.
CR: the former Computer Science 2741
PR: MATH 2320
3320 Abstract Algebra is an introduction to groups and group homomorphisms including cyclic groups, cosets, Lagrange's theorem, normal subgroups and quotient groups, introduction to rings and ring homomorphisms including ideals, prime and maximal ideals, quotient rings, integral domains and fields.
PR: MATH 2320
3340 Introductory Combinatorics includes Topics such as distributions, the binomial and multinomial theorems, Stirling numbers, recurrence relations, generating functions and the inclusion-exclusion principle. Emphasis will be on applications.
PR: MATH 2320
3370 Introductory Number Theory is perfect numbers and primes, divisibility, Euclidean algorithm, greatest common divisors, primes and the unique factorization theorem, congruences, cryptography (secrecy systems), Euler-Fermat theorems, power residues, primitive roots, arithmetic functions, Diophantine equations, topics above in the setting of the Gaussian integers. PR: MATH 2320
3410 Mathematical Statistics I is basic probability concepts, combinatorial analysis, conditional probability, independence, random variable, distribution function, mathematical expectation, Chebyshev's inequality, distribution of two random variables, binomial and related distributions, Poisson, gamma, normal, bivariate normal, t , and F distributions, transformations of variables including the moment-generating function approach.
CR: Statistics 2410
OR: one and a half hour tutorial period weekly
PR: MATH 2000
4132 Introduction to Optimization is an introduction to optimization,
analytic methods for functions of one variable and for functions of several variables, classical maxima and minima, necessary and sufficient conditions, constrained optimization, equality and inequality constraints, Kuhn-Tucker conditions, introduction to the calculus of variations, linear programming, simplex algorithm.
PR: MATH 3202 and 2260 (or the former MATH 3260)
4160 Partial Differential Equations I covers two point boundary value problems, Fourier series, Sturm-Liouville theory, canonical forms, classification and solution of linear second order partial differential equations in two independent variables, separation of variable, integral transform methods.
PR: MATH 3202 and 2260 (or the former MATH 3260)
4242 Algorithms and Complexity is a study of the correctness and complexity of algorithms, with particular focus on algorithms important in mathematics. Topics may include sorting and binary search, string searching, integer multiplication and exponentiation, matrix multiplication, geometric problems such as closest pair of points and convex hull, probabilistic and approximative algorithms. This course discusses polynomial reductions and NP-completeness.
PR: MATH 3132 and 3240 and Computer Science 1510 or the former 1710 or the former 2710 or the former 2602 or Engineering 1020 or permission of the Chair of Computational Mathematics
4291-4299 Special Topics in Computational Mathematics is a variety of topics in Mathematics.
PR: permission of the Chair of Computational Mathematics
4305 Mathematical Logic starts with a brief overview of basic set theory, followed by an introduction to propositional and predicate logic and basics of model theory (models, theories, compactness theorem) and computability theory (computable and computably enumerable sets, first order arithmetic).
PR: MATH 2320 and 6 credit hours in Mathematics at the 3000 -level or higher or permission of the Chair of Computational Mathematics
4340 Combinatorial Analysis continues most of the topics started in 3340 with further work on distributions, recurrence relations and generating functions. Generating functions are used to solve recurrence relations in two variables. Also included is a study of Polya's theorem with applications.
PR: MATH 2000 and 3340
4345 Advanced Graph Theory (same as the former MATH 4290) includes topics which may be chosen from matchings, factorizations, adjacency matrices, eigenvalues of graphs, strongly regular graphs, independent sets and cliques, cuts and connectivity, graph products, graph homomorphisms, edge colourings, domination, and graph searching.
CR: the former MATH 4290
PR: MATH 2051 and 3240
4950 Senior Project is a course in which, under the guidance of a faculty member, students conduct a scientific study based upon original research or a critical review of extant data in an appropriate area. Normally the project will have a computational component. Students are required to submit a report and give a presentation.
PR: permission of Program Chair

### 13.22 Philosophy

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the appropriate Dean of the School.
Philosophy courses are designated by PHIL.
1002 Introduction to Philosophy (same as the former PHIL 1200) is a general introduction to the study of Philosophy both as a contemporary intellectual discipline and as a body of knowledge. It introduces philosophy's forms of enquiry, the nature of its concepts, and its fields (epistemology, logic, metaphysics, aesthetics, ethics, and political philosophy) by way of the critical study of primary works by major philosophers. Authors may include Plato, Aristotle, Aquinas, Descartes, Hume, Kant, Nietzsche, de Beauvoir, Arendt.
CR: the former PHIL 1200
1005 Philosophy of Human Nature (same as the former PHIL 1600, the former PHIL 1000) is an approach to philosophical thinking by way of analysis and critique of theories of human nature, classical and modern, and the world views associated with them. This course is of particular value to students interested in the Social Sciences and Humanities.
CR: the former PHIL 1000, the former PHIL 1600
2020 Epistemology (same as the former PHIL 2220) introduces philosophy by way of the question of the nature of knowledge. Is knowledge a possession or an activity? Is truth an illusion, a correspondence, or a form of coherence? What does it mean to 'hold a belief' or 'affirm a proposition'?
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

Short classical texts form the basis of the works studied and may include Plato, Descartes, and Ayer.
CR: the former PHIL 2220
2030 Logic aims to improve the student's ability to formulate and evaluate arguments. At the end of the course, the student will have a thorough understanding of the essentials of argument, the rules of valid inference, and ways of proving the validity of good arguments and the invalidity of bad arguments. Open in any year to all students wishing acquaintance with basic logical skills.
CR: the former PHIL 2210
2050 Social and Political Philosophy is concerned with the social and political institutions and practices by which human life is organized. Historical and/or contemporary texts will be engaged to explore some of the following issues: What is the nature of political authority? What is the nature of freedom? What material and social conditions must be met in order for societies to be just? How are existing societies unjust, and how should that injustice be addressed?
CR: the former PHIL 3400
2100 Health Ethics (same as the former PHIL 2551) examines concepts of health and illness and their ethical implications.
CR: the former PHIL 2551, the former PHIL 2803
2130 Environmental Ethics (same as the former PHIL 2561, the former PHIL 2809) is a philosophical approach to issues in ecology. Topics may include historical and contemporary concepts of nature, technology, the ethical status of animals and the non-human, the application of traditional ethical paradigms to environmental issues, and the future of humanity in an age of climate change, ballooning human population, disappearing wilderness, and dwindling resources.
CR: the former PHIL 2561, the former PHIL 2809
2201 History of Ancient Philosophy (same as Classics 2701, the former Philosophy 2701, the former Philosophy 2701) introduces students to the origins of philosophy in the West. Topics include cosmology, metaphysics, physics, ethics, God, and the ancient ideal of philosophy as a 'way of life.' We will examine the texts and fragments of the most influential and foundational philosophers of the ancient world, focusing primarily on the thought of Plato and Aristotle, their engagement with the Pre- Socratic philosophers who came before them, and their influence upon philosophers since.
CR: Classics 2701, the former Philosophy 2701
2215 History of Modern Philosophy same as the former PHIL 2702) is a survey of the development of Western philosophy since the 17th century until the late 18th century. Topics may include the existence of God, whether nature is determined and if there is free will, the rise of early modern science, and the debates over rationalism and empiricism.
CR: the former PHIL 2702
2310 Philosophy and Literature engages philosophically with different literary forms such as poetry, drama, and fiction. Possible topics include the use of literary works to express philosophical ideas, the nature of literary expression, and different traditions of literary criticism and interpretation. Course readings will comprise both literature and philosophy.
CR: the former PHIL 3610
2340 Philosophy of Film (same as the former PHIL 2581) introduces some of the central philosophers, topics and themes in the philosophy of film. Topics and themes include: the nature of film image, the relationship between film and "reality", the social/ political role and function of film and the nature and value of the documentary. The course will also consider the representation of broader philosophical ideas in film. A film or films will accompany each section.
CR: the former PHIL 2581
3010 Plato (same as the former PHIL 3730) examines Plato's philosophy from selections representing the Socratic, transitional, eidetic, and stoichiological dialogues, as well as Plato's philosophy of the concrete. Plato's thought will be examined as a development of ideas and problems raised in Pre-Socratic philosophy, and the development of his own philosophy will be traced throughout a selection of his writings.
CR: the former PHIL 3730
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3020 Aristotle (same as the former PHIL 3734) examines Aristotle's philosophy of nature, logical works, metaphysics, psychology, and ethics. Attention will also be given to Aristotle's philosophy as a development of and response to Plato's thought. Whether one is a student of Philosophy, History, English, Religion, Classics, Political Science or History of Science, a familiarity with the thought of Aristotle is indispensable. For all these disciplines, not only is his place in history foundational, but his influence often remains formidable today.
CR: the former PHIL 3740
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3310 German Idealism (same as the former PHIL 3860) is a study of postKantian classical German philosophy from 1787-1831. The generation of
philosophers immediately following Kant - most notably Fichte, Schelling, and Hegel - took his ideas and developed systematic interpretations of human experience, emphasizing its embodied and social nature, and interpreting history in terms of the struggle between freedom and oppression. This course studies these "German Idealists" who have continued to shape major developments in European philosophy.
CR: the former PHIL 3860
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3400 Political Philosophy is leading philosophical ideas concerning the origin and justification of political institutions.
3430 Existentialism (same as the former PHIL 3940) is a philosophical tradition dedicated to thinking through the experience of human freedom and to casting doubt on conventional answers to the question of how we should live. Human beings are free to define themselves, according to existentialism, but with that freedom comes a forbidding challenge: the responsibility to define themselves, without any easy answers to the question of how. This course will address some of the central figures associated with existentialism. Authors may include Nietzsche, Kierkegaard, Sartre, de Beauvoir, and Camus.
CR: the former PHIL 3940, the former PHIL 3980
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3610 Philosophy and Literature is a study of the interrelationship of thought and imagination in philosophical and literary forms of writing.
4000 Seminar in Metaphysics (same as the former PHIL 4250) focuses on a primary text or texts surrounding a particular metaphysical question. Topics may include: the nature of being, causality, order, unity, essence and existence, and freedom.
CR: the former PHIL 4250
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
4100-4199 Special Topics in Major Authors and Texts (same as the former PHIL 4700-4790, the former PHIL 4800-4890) will have topics to be studied announced by the Department.
CR: the former PHIL 4700-4790, the former PHIL 4800-4890
PR: 6 credit hours in Philosophy courses at the 3000 level

### 13.23 Physics

Physics courses are designated by PHYS.
1020 Introductory Physics I is an algebra-based introduction to Newtonian mechanics. Topics covered include motion in one and two dimensions, Newton's laws, momentum, energy and work, and rotational motion. Previous exposure to physics would be an asset but is not essential.
CO: Mathematics 1090 or 109B
CR: PHYS 1050
LH: 3; six laboratory sessions per semester
OR: tutorial or problem sessions may be held on weeks when no laboratory is scheduled
PR: Level III Advanced Mathematics or Mathematics 1090 or 109B. It is recommended that students have completed at least one high school physics course; and Science 1807 and Science 1808.
1021 Introductory Physics II is an algebra-based introduction to oscillations, fluids, wave motion, electricity and magnetism, and circuits.
LH: 3; normally there will be six laboratory sessions per semester
OR: tutorial sessions may be held on weeks when no laboratory is scheduled
PR: PHYS 1020 or 1050, and Mathematics 1090 or 1000, and Science 1807 and Science 1808

1050 General Physics I: Mechanics is a calculus-based introduction to mechanics. The course emphasizes problem solving, beginning with a review of vectors and one-dimensional kinematics. The main part of the course covers motion in two dimensions, forces and Newton's Laws, energy, momentum, rotational motion and torque, and finally oscillations. For details regarding recommendations for students taking PHYS 1050, see Physics and Physical Oceanography, Note 4.
CO: Mathematics 1000
CR: PHYS 1020
LH: 3
PR: Mathematics 1000; Science 1807 and Science 1808
1051 General Physics II: Oscillations, Waves, Electromagnetism is a calculus-based introduction to oscillations, wave motion, and electromagnetism. Topics include: simple harmonic motion; travelling waves, sound waves, and standing waves; electric fields and potentials; magnetic forces and fields; electric current and resistance; and electromagnetic waves.
CO: Mathematics 1001
LH: 3
PR: PHYS 1050, or 1021 , or 1020 (with a minimum grade of $70 \%$ ) and Mathematics 1001; Science 1807 and Science 1808
2053 Fluids and Thermal Physics examines elasticity, fluid mechanics,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
thermodynamics, kinetic theory and statistical mechanics.
CO: Mathematics 1001 and PHYS 1051
LH: 3
PR: Mathematics 1001 and PHYS 1051; Science 1807 and Science 1808
2056 General Physics VI: Modern Physics is special relativity, quanta of light, atomic structure and spectral lines, quantum structure of atoms and molecules, nuclei and elementary particles.
CO: Mathematics 1001 and PHYS 1051
CR: PHYS 2750
LH: 3
PR: Mathematics 1001, PHYS 1050 (or PHYS 1020 and PHYS 1021), and PHYS 1051; Science 1807 and Science 1808

## 2065 Experimental and Computational Physics - inactive course.

2150 The Foundation of Astronomy represents a general introduction to astronomy. The course emphasizes the scientific method, basic physics, night sky and objects in our solar system. Topics include space science, telescopes, spectroscopy, atomic structure, the formation and evolution of planetary systems, and the detection and properties of exoplanets.

2151 Stellar Astronomy and Astrophysics is atomic structure and spectra. The sun: radiation, energetics, magnetic field. Stars: distance, velocity, size, atmospheres, interiors. Variable stars, multiple stars, clusters and stellar associations. Stellar evolution, interstellar matter, structure of the Milky Way Galaxy. Exterior galaxies, quasi-stellar objects, pulsars. Cosmology.
PR: 6 credit hours in Mathematics at the first year level
2400 Subatomic Physics is an introduction to nuclear and particle physics. Topics include nuclear properties and models; radioactive dating; fission; nuclear reactors; accelerators; the detection, classification, and properties of subatomic particles. Applications in areas such as ecology, dosimetry, medical physics and nuclear astrophysics are discussed.
PR: Level III Advanced Mathematics or Mathematics 1090 or 109B. It is recommended that students have completed at least one of Level II and Level III high school physics courses.
2553 Introduction to Analog and Digital Electronics covers the basics of the analog and digital electronics; direct current circuits, capacitors and inductors, alternating currents, test equipment and measurement, transducers, diodes and transistors, introduction to operational amplifiers, digital basics, digital circuitry and digital analog I/O. This course is a combined lecture/laboratory course with two three-hour sessions scheduled per week.
PR: Mathematics 1000 or equivalent, PHYS 1021 or 1051; Science 1807 and Science 1808

2820 Computational Mechanics introduces computational methods in the context of Newtonian mechanics. Numerical differentiation and integration, numerical solutions to differential equations and data analysis are applied to projectile motion, N -body systems, oscillations and problems from astrophysics and geophysics. Implementation of numerical methods using computer programming is emphasized.
CO: Mathematics 2000
LH: 2
PR: Mathematics 2000 and PHYS 1051
3060 Electricity and Magnetism is point charges; Coulomb's law; electrostatic field and potential; Gauss' law; conductors; magnetostatics; Ampere's law; Biot-Savart law; dielectric and magnetic materials; electrostatic and magnetostatic energy; Lorentz force; time varying fields; Faraday's law; Lenz's law; Maxwell's equations.
CO: Mathematics 2260 (or the former Mathematics 3260)
LH: 3
PR: PHYS 1051 and Mathematics 2260 (or the former Mathematics 3260); Science 1807 and Science 1808

3061 Electromagnetic Theory includes Maxwell's equations, energy and momentum in electromagnetic systems, EM waves, potentials and fields, dynamical systems of charges, radiation, the interaction of EM fields with matter, and the relativistic formulation of electromagnetism and its applications.
PR: PHYS 3060
3160 Stellar and Galactic Astronomy is the physics and mathematics of stars and galaxies. Orbits and the two-body problem, radiation and matter, theory of stellar atmospheres, structure and evolution of stars. Galaxies: Morphology and kinematics. Milky Way kinematics and structure, large-scale star formation, the distribution of interstellar matter in galaxies. Starburst and active galaxies, An introduction to cosmology.
CR: PHYS 3150 and PHYS 3151
PR: Mathematics 2000, PHYS 2056, PHYS 2151. PHYS 3220 is
recommended.
3180 Observational Astrophysics covers theoretical topics including celestial mechanics, continuous and line spectra, stellar structure and nucleosynthesis, and stellar evolution. Observational topics include planning observations, acquisition of images with a CCD electronic camera,
fundamentals of astronomical image processing, photometry, and stellar spectroscopy using a variety of software packages.
LH: 3
PR: Mathematics 2000, PHYS 2056. PHYS 2151 is recommended.
3220 Classical Mechanics I covers vector operations, coordinate transformations, derivative of vectors, Newton's laws, differential equations, kinematics and dynamics of a particle, linear and quadratic air resistance, terminal velocity, momentum of a time varying mass, center of mass systems, angular momentum, moment of inertia, energy, work-energy theorem, forces as the gradient of potential energy, time dependent potential energy, curvilinear one-dimensional systems, energy of a multiparticle system, calculus of variations, and Lagrangian Dynamics.
CO: PHYS 2820, Mathematics 2260 and the former 3220
PR: PHYS 2820, Mathematics 2260 and 3202
3230 Classical Mechanics II covers noninertial frames of reference, Newton's second law in a rotating frame, centrifugal force, Coriolis force, motion of rigid bodies, center of mass, rotation about a fixed axis, rotation about any axis, inertia tensor, Euler's equations with zero torque, coupled oscillators, chaos theory, bifurcation diagrams, state-space orbits, Poincare sections, Hamiltonian dynamics, ignorable coordinate, phase-space orbits, Liouville's theorem, scattering angle, impact parameter, differential scattering cross section, and Rutherford scattering.
CO: Mathematics 3202
PR: PHYS 3220, and Mathematics 2260 and 3202
3250 Elementary Particles and Fields includes the Standard Model, classification of elementary particles and forces of nature, symmetries, conservation laws, quark model, quantum electrodynamics, quantum chromodynamics, and the theory of weak interactions.
PR: Mathematics 3202, Mathematics 2260 (or the former Mathematics 3260), PHYS 2056, PHYS 2400

3400 Thermodynamics covers the first and second laws of thermodynamics. Entropy. Thermodynamics of real substances. Kinetic theory of matter. Introduction to statistical mechanics.

## PR: Mathematics 2000, PHYS 2053 and PHYS 2750 or 2056

3650 Quantum Mechanics I includes a review of elementary quantum physics and covers topics such as wave functions, operators, expectation values, the Schrodinger equation in 1 -dimension, states and operators in Hilbert space, coordinate and momentum representations, quantum mechanics in three dimensions, angular momentum, spherically symmetric potentials, and approximation methods.
PR: Mathematics 3202, PHYS 2056, PHYS 3220
3820 Mathematical Physics II examines the functions of a complex variable; residue calculus. Introduction to Cartesian tensor analysis. Matrix eigenvalues and eigenvectors. Diagonalization of tensors. Matrix formulation of quantum mechanics. Quantum mechanical spin. Vector differential operators in curvilinear coordinate systems. Partial differential equations of Mathematical Physics and boundary value problems; derivation of the classical equations, separation of variables; Helmholtz equation in spherical polar coordinates.
PR: Mathematics 2260 (or the former Mathematics 3260), and PHYS 3810 (or Mathematics 3202)

4100 Senior Physics Seminar is a review of current topics in Physics discussed in a seminar format. Seminars are presented by faculty, students, and guest speakers. Topics are normally drawn from the fields of sub-atomic \& nuclear physics or astronomy \& cosmology.
PR: normally restricted to Physics students who have completed 78 credit hours or more

4880 Physics Laboratory introduces the student to advanced laboratory work in several areas of physics.
PR: Physics students who have completed 60 credit hours or more; Science 1807 and Science 1808

4950 Research Experience in Physics is an opportunity for students to participate in original research under the supervision of a faculty advisor. Students are required to present a written report and to give a seminar on their work.
PR: Physics students who have completed 78 credit hours or more and permission of the Physics Program Chair

### 13.24 Political Science

Political Science courses are designated by POSC.
The second digit in each course number designates a field in Political Science. Students interested in notionally concentrating in an area may be guided in their course selections, as follows:

## Second Digit

0 General \& Research techniques
1 Political theory
2 International politics
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3 Comparative politics
6 Public policy and public administration
8 Canadian politics
9 Special topics
1000 Introduction to Politics is an introduction to basic concepts in the study of politics, power, law, public policy and government, touching on major areas of political ideologies, institutions, and current domestic and international political issues. Suitable for students in all disciplines.

1010 Issues in Canadian Politics and Policy explores some of Canada's most pressing and interesting political and public policy issues. This course profiles important political problems facing federal and provincial politicians and society. Open to all students interested in Canadian politics, government and domestic public policy.

1020 Issues in World Politics explores some of the world's most pressing and interesting political issues. This course profiles important political problems, such as a power struggle within a particular country, a controversial topic that affects an entire continent, or a major crisis that has implications for inhabitants around the world. Suitable for students in all disciplines who have an interest in international politics.

2200 Introduction to International Politics is an examination of the "building blocks" of international politics including determinants, means, processes and ends. Emphasis is on the post-1945 period.

2300 Introduction to Comparative Politics is an introduction to comparative politics and techniques of comparative analysis across political jurisdictions. This course focuses on the differences between, and similarities among, a variety of countries and systems of government.

2500 Introduction to Political Behaviour - inactive course.
2600 Introduction to Public Policy and Administration outlines major concepts in, and issues relating to, the fields of public policy and administration. Introduces students to major conceptual issues that shape public policy and government, such as agenda setting, types of public policy models and public management processes. Open to all students interested in the study of public policy and public administration.

2800 Introduction to Canadian Politics and Government introduction to the structure and operations of institutions of Canadian government and the nature of political actors. Topics to be examined may include the constitution, federalism, parliament, political parties, political culture and elections.
CR: the former POSC 2710
3351 Politics and the Environment (same as the former POSC 3550) is an examination of the environmentalist movement, interest groups, and green parties; the impact of environmentalism on conventional parties and public opinion; and the dynamics of support for and opposition to the achievement of environmentalist objectives.
CR: the former POSC 3550
3631 Environmental Policy (same as the former POSC 3731) is an examination of the formation, implementation, and impact of public policies concerning the environment including an examination of different policy approaches and the problems of environmental regulation.
CR: the former POSC 3731

### 13.25 Psychology

Psychology 1000 and Psychology 1001 are prerequisites for all Psychology courses.
1000 and 1001 Introduction to Psychology is an introduction to Psychology as a biological and social science. Topics shall include research methodology, physiological processes, perception, learning, memory and cognition, human development, animal behaviour, emotion, motivation, consciousness, personality and individuality, psychological disorders and treatment, and social psychology
PR: Psychology 1000 is a prerequisite for Psychology 1001
2925 Research Methods and Data Analysis in Psychology I will cover basic research methods and supporting statistical concepts and techniques. Basic methods will include observational techniques, correlational studies, and surveys. Supporting statistical concepts will include populations and samples, measures of central tendency and variability, basic probability, correlation, simple linear regression and validity and reliability. Supporting statistical techniques will include producing tables and graphs, and the calculation and interpretation of measures of central tendency, variability, probabilities, correlation, and simple linear regression. Students will also learn how to write a description of a simple study in basic APA style, and how to use a statistical package to analyse surveys and calculate correlation. Basic ethical principles in conducting research will be introduced. This course includes a weekly laboratory.
CR: Psychology 2910, Statistics 2500, Statistics 2550, the former
Psychology 2900, and the former Statistics 2510

LH: 3
2950 Research Methods and Data Analysis in Psychology II will cover basic experimental methods and supporting statistical concepts and techniques. Basic designs will include one factor designs (independent and repeated measures). Supporting statistical concepts will include statistical sampling distributions ( t and F), internal and external validity, hypothesis testing, and simple interactions. Supporting statistical techniques will include independent and repeated measures t-tests, one-factor independent and repeated measures ANOVA, and selected multiple comparisons techniques. Students will also learn how to write a description of an experiment in APA style, how to critically analyse a report of an experiment, how to use and interpret a statistical package to analyse experimental data, and how to conduct literature searches.
CR: the former Psychology 2901, Statistics 2501, and Statistics 2560
LH: a weekly laboratory
PR: Psychology 2925 or equivalent
3950 Research Methods and Data Analysis in Psychology III will cover advanced research methods, including survey methods, and supporting statistical concepts and techniques. Designs will include single factor designs and multi-factor designs with both random and fixed factors. Supporting statistical concepts will include analysis of variance (ANOVA) from a linear model perspective, statistical power, and multiple regression, including model building. There may be a general introduction to multivariate statistical techniques. Ethical issues in research will be discussed in detail. Students will be required to design and carry out at least one research project from the design to the writeup stage, including an ethics review CR: Psychology 3900, Statistics 3520, the former Psychology 3520
LH: a weekly laboratory
PR: Psychology 2950 or equivalent

### 13.25.1 Survey Courses

2025 Survey of Developmental Psychology is a survey of the cognitive, social, and personality development of people. Development will be tracked from the prenatal stage to old age. Topics to be studied shall include: research methodology, genetics, prenatal development, environmental effects during prenatal development, attachment, emotional development, language development, intelligence, cognitive development, socialization, sex-roles and gender identity, adolescence, adulthood and aging.
CR: Psychology 2010, Psychology 2020, the former Psychology 2011
2125 Survey of Social Psychology is a survey of how the behaviour of individuals is influenced by others. Topics to be studied shall include: methodology and ethics, social cognition, social perception, attitude formation and change, interpersonal attraction, social influence, group processes and leadership. Additional topics may include: aggression, prosocial behaviour, sex and gender, environmental effects, organizational behaviour, health, stress and psychology and the law.
CR: Psychology 2100 and Psychology 2120
2225 Survey of Learning is a survey of learning phenomena and learning theories. Topics to be studied shall include: the evolutionary context of learning, habituation and sensitization, imprinting, Pavlovian conditioning, instrumental learning, generalization and discrimination in learning and neural mechanisms of learning.

CR: Psychology 2240 and the former Psychology 2250
2425 Survey of Cognitive Psychology is a survey of how humans process and retain information. Topics to be studied shall include: perception and pattern recognition, attentional processes and memory. The influence of stored information on selected behaviours will be considered. Selected behaviours may include language processing, concept formation, problem solving, decision making and practised and skilled performance.
CR: Psychology 2440 and Psychology 3450
2625 Survey of Personality is a survey of the theories of personality and relevant selected areas of research in the area of personality. Issues related to the application of this information to understanding abnormal behaviour will also be discussed. Theoretical systems covered will include: psychodynamic theory, behaviourism and cognitive-behavioural theory, humanism, traits and dispositions, social learning theory, psychological constructivism, information processing and biological theories of personality.
CR: Psychology 2610, the former Psychology 2620, and the former
Psychology 2200.
2825 Survey of Biological Psychology is a survey of the biological bases of behaviour. Topics to be studied shall include: the structure and function of the nervous system, sensory structures and sensory coding, homeostasis, emotions, circadian rhythms and sleep, sexual behaviour, psychopharmacology, consciousness and language, behavioural evolution and behaviour genetics.
CR: Psychology 2810 and the former Psychology 2850

### 13.25.2 Contemporary Issues Courses

3025 Contemporary Issues in Developmental Psychology examines in
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
depth one or more areas of research within developmental psychology. Some topics that may be examined include cognitive development, social development, developmental psychopathology, and child eyewitness testimony.
PR: Psychology 2025 and Psychology 2925
3040 Contemporary Issues in the Psychology of Death and Dying uses psychological research, theory, and clinical experience to study death, dying and bereavement throughout the life cycle. Some selected topics include understanding death, the process of dying, care of the dying, medical ethics, suicide, and the psychological impact of life-threatening conditions. In addition, trauma, grief, and bereavement in children, adolescents, and adults are explored.
PR: Six credit hours in 2000 level psychology courses
3125 Contemporary Issues in Social Psychology examines in depth one or more areas of research within social psychology. Some topics that may be examined include the psychology of prejudice, criminal behaviour, social influence, and aggression.
PR: Psychology 2125 and Psychology 2925
3126 Contemporary Issues in the Psychology of Women explores the psychology of women from varying cultural perspectives, such as racial, sexual orientation, age and class. Topics include the history of women in psychology, women's development across the life span, women and social relationships, and violence against women.
PR: Six credit hours in 2000 level psychology courses
3225 Contemporary Issues in Learning examines in depth one or more areas of research in learning and cognition. Topics may include associative learning, instrumental conditioning, discrimination learning, category formation, memory, navigation, social cognition and learning, intelligence, concepts of time and number, self-awareness and communication and language.
PR: Psychology 2225 and Psychology 2925
3226 Contemporary Issues in the Psychology of Education is an introduction to the application of psychology to issues in education in a variety of settings. It examines the theoretical and applied aspects of learning and cognitive development; motivation; personal and social development; and evaluation, measurement, and assessment.
PR: Six credit hours in 2000 level psychology courses
3325 Contemporary Issues in Sensation and Perception examines the functioning of human sensory systems and how physical stimuli are transformed into signals that can be understood by the nervous system. In both human and animal models how the brain receives and processes, information from the visual, auditory, gustatory, olfactory, and somatosensory systems may be examined. Basic psychophysics may also be examined.
PR: Psychology 2925 and Psychology 2425 or Psychology 2825
3425 Contemporary Issues in Memory and Cognition uses current psychological theories and research to examine aspects of human memory and cognition. Topics may include, but are not limited to, perception and pattern recognition, attentional processes, knowledge representation, working and long term memory, language, problem solving, decision making, expert performance, and abnormalities in cognition.
PR: Psychology 2425 and Psychology 2925
3525 Contemporary Issues in Emotion introduces the biological, cognitive, and social influences on emotions. Attention is given to unconscious (automatic) processes, nonverbal emotional expressions, and understanding specific emotions. Contemporary research may be highlighted in such areas as the effects of hormones, emotional intelligence, the consequences of problems in emotional development, or emotions in therapy.
PR: Psychology 2925 and any Survey Course in Psychology from the
Grenfell Campus Psychology Program
3625 Contemporary Issues in Personality examines in depth one or more areas of research with personality psychology. Some topics that may be examined include stress and health, psychoanalysis, psychology of motivation, and personality in work organizations.
PR: Psychology 2625 and Psychology 2925
3626 Contemporary Issues in Abnormal Psychology explores the definition of abnormal behaviour, clinical assessment, classification, and diagnosis. The core theoretical perspectives on psychological disorders are examined. For each disorder the diagnostic criteria, etiology, treatment, and prognosis is presented. This course enhances the students' ability to think critically about issues pertaining to mental health and illness.
CR: Psychology 3640, Psychology 3650, and the former Psychology 3600 PR: Psychology 2625 and Psychology 2925
3627 Contemporary Issues in Psychotherapy introduces students to the major theories, concepts and practices of contemporary approaches to psychotherapy. It includes the exploration of ethical and professional issues in professional practice.
PR: Psychology 2625 and Psychology 2925

3628 Contemporary Issues in Psychological Testing and Measurement explores the development and application of tests and techniques for psychological assessment. A review of test construction and evaluation examines methods of item analysis, reliability, validity, and test norms. The major domains of applied psychological assessment are examined. Ethical issues in psychological assessment are presented throughout the course.
PR: Psychology 2950 and any one of Psychology 2025, Psychology 2425, Psychology 2625.
3725 Contemporary Issues in Animal Behaviour includes one or more areas of research in animal behaviour and/or evolutionary psychology. Topics may include history of animal behaviour and/or evolutionary psychology, genetic analysis of behaviour, evolutionary theory and natural selection, development of behaviour, sensation and perception, orientation, foraging, antipredator behaviour, learning, cognition, sociality and dispersion, sexual reproduction and sexual selection, parental care and mating systems, altruism, aggression, communication and social dominance.
PR: Psychology 2925 and Psychology 2825 or Psychology 2225
3825 Contemporary Issues in Physiological Psychology includes one or more areas of research in neuroscience and/or behavioural neuroscience. Topics may include neurophysiology and neuroanatomy, methodology including brain imaging, developmental disorders, sensory-perceptual and motor systems, physiological basis of attention, memory, language, emotion and spatial behavior, alterations of consciousness, neurological disorders, plasticity, recovery and rehabilitation and neuropsychological assessment.
PR: Psychology 2825 and Psychology 2925

### 13.25.3 Senior Courses

4910 Systems of Psychology is a study of paradigms and explanations in contemporary psychology in the context of their historical antecedents.
PR: at the St. John's campus, 30 credit hours in Psychology courses required in the majors program and admission to a Major in Psychology or Behavioural Neuroscience or, at the Grenfell campus, 30 credit hours in Psychology courses including Psychology 3950
4925 Senior Seminar in Psychology is weekly seminars for faculty and senior students in Psychology. Current issues in academic and professional psychology shall be discussed.
PR: 30 credit hours in Psychology including Psychology 3950 or
permission of the Chair of Psychology
4950 Independent Project in Psychology is under the supervision of a Faculty member where students will independently carry out approved projects and prepare reports of their findings.
CR: Psychology 4951
PR: 30 credit hours in Psychology including Psychology 3950 or permission of the Chair of Psychology
4951 Honours Project in Psychology I is under the supervision of a Faculty member and each student will independently review an area of psychology and prepare a thesis proposal for further investigation.
CR: Psychology 4950
PR: 30 credit hours in Psychology including Psychology 3950 or

- permission of the Chair of Psychology and admission to the Honours program in Psychology
4959 Honours Project in Psychology II is a continuation of Psychology 4951. Under the supervision of a Faculty member, each student will independently carry out an approved project which will result in an honours thesis.
PR: Psychology 4951 or the permission of the Chair of Psychology and admission to the Honours program in Psychology


### 13.25.4 Non-Restricted Courses

2150 Introduction to Forensic Psychology will provide an in-depth overview of the relationship between psychology and the law. A variety of topics will be discussed and critically evaluated, including the use and misuse of psychology-based investigative methods such as offender and geographic profiling, detection of deception, investigative interviewing, eyewitness testimony, jury decision-making, corrections and treatment, risk assessment, and criminal responsibility.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2800 Drugs and Behaviour is an examination of the neurophysiology of drug action, the measurable effect of drugs on experimentally controlled behaviour, and a survey of information available on common selfadministered drugs and their immediate and long-term effects.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
3533 Sexual Behaviour covers the most important aspects of human sexuality with a psychology theory and research framework. The course will examine the biological, behavioural and socio-cultural bases of the human

[^14]sexual response. Topics include sexual interaction and communication, contraception, sexually transmitted infections, reproduction, sexual orientation, transgender and intersex, variations in sexual behaviour, sex and gender, sexual dysfunction and therapy, and sexual coercion.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major

### 13.26 Religious Studies

Unless otherwise specified, Religious Studies courses do not have prerequisites. Students who register in a 3000 - or 4000 -level course are encouraged, however, to make sure that they have adequate preparation for that course, preferably by having completed a first- or second-year course in the field.
Religious Studies courses are designated by RELS.
1000 The Religions of the World is an introduction to the basic beliefs and practices of the world's great religions.
CR: the former RELS 2010
1032 Introduction to Asian Religions and Culture is a broadly based survey course introducing students to the religions, culture, and societies of Asia. Traditions explored may include those of India (Hinduism, Buddhism, Sikhism, Jainism), China (Daoism, Confucianism, Buddhism), Japan (Shinto, Zen Buddhism), and Korea.
2013 Christianity is a study of the Christian tradition, its development and variety. The course will include an examination of the beliefs and practices of both Eastern and Western Christianity and a study of the main differences among the major Western denominations.
CR: the former RELS 2130, 2140
2050 The Old Testament is an introduction to the historical background, literary structure, and content of the Old Testament. Emphasis will be placed on the authorship and dating of the various texts that comprise the Old Testament, as well as on major themes, figures, and events.

2051 The New Testament is an introduction to the history and literary structure of the documents comprising the New Testament. Emphasis will be placed on the major themes found in these documents and on the distinctiveness of approach of the individual writers.

2350 Religious Institutions (same as Anthropology 2350) is a contextual study of religious institutions and beliefs, calendrical feasts and solemnities, religious roles and hierarchies, ritual innovation and revitalization.
CR: Anthropology 2350, the former Sociology/Anthropology 2350, the former Sociology 2350
2400 Buddhism examines the history of Buddhist traditions in Asia, with consideration of the major developments in Buddhist philosophy, institutions, and practices.
CR: the former RELS 3400
2410 Hinduism examines the history of Hindu religious traditions, their major religious texts, institutions, and practices, and their role in social, political, and cultural movements in India and in Hindu diaspora communities.
CR: the former RELS 3410
2610 Introduction to Religious Ethics is an introduction to religious ethics through the systematic study of selected writers and issues in biomedicine, human sexuality, and social justice. Possible topics for discussion include euthanasia, abortion, poverty, and unemployment.
CR: the former RELS 2600 and the former RELS 2601
3010 Greek Religion (same as Classics 3010) is a study of the role of religion in the private and public life of the Greek world.
CR: Classics 3010 and the former RELS/Classics 3121
3020 Roman Religion (same as Classics 3020) is a study of the role of religion in the private and public life of the Roman world.
CR: Classics 3020 and the former RELS/Classics 3121
3200 Jesus of Nazareth is a study of the historical Jesus. Beginning with an assessment of the relevant source material, this course explores what can be known about the life of Jesus of Nazareth in its historical and cultural contexts.
3210 Paul and His Writings is a study of the writings of the Apostle Paul in the New Testament. and his contribution to Christianity in the cultural and historical milieu in which he lived and was active.

3310 Judaism at the Time of Jesus will explore the developments in Jewish thought, institutions, beliefs, and practices from the Babylonian Exile of the sixth century B.C.E. to the time of Jesus, King Herod and the Roman Empire of the first century C.E.
CR: the former RELS 3220
3401 Zen, Buddhist Meditation, and Buddhist Psychology examines the
relationship between meditation and theories of human psychology in Buddhism from its origins to its formulation in Zen.

3820 Religion and the Arts (same as Visual Arts 3820) is an examination of the role of art in the expression of religious ideas, together with a study of specific religious themes and concerns in one or more of the following: literature, film, music, painting, sculpture and dance.
CR: Visual Arts 3820
3831 Religious Themes in Contemporary Songwriting is a study of religious themes in contemporary songwriting through the in-depth examination of the work of a selection of contemporary songwriters. The course will explore how religious questions and themes are handled in contemporary song and explore how song as an artistic medium expresses religious meaning. Songwriters to be explored may include the following: Bob Dylan, Bob Marley, Joni Mitchell, Leonard Cohen, Van Morrison, Tori Amos, Nick Cave, Alanis Morissette, Julie Miller, the Louvin Brothers, the Stanley Brothers, Hank Williams, etc.
3880 Religion, Worldviews, and the Environment examines the human connection to the natural world as expressed in traditional religions, indigenous worldviews and contemporary approaches to environmental crises.

### 13.27 Science

Science courses are designated by SCl
1807 Safety in the Scientific Laboratory introduces students to safety practices required for working in science laboratories where hazards are present. Students complete an online module in Laboratory Safety. Normally, it will be taken before the start of the semester in which students take their first science laboratory course with this prerequisite, and it must be completed no later than the first Friday of the semester. Check department lists of courses to see where this is a prerequisite.

## $\mathrm{CH}: 0$

OR: only offered online; completion time estimated to be one hour
1808 WHMIS introduces students to Newfoundland and Labrador's Workplace Hazardous Materials Information System (WHMIS). Students will complete an online module in WHMIS. Normally, it will be taken before the start of the semester in which students take their first science laboratory course with this prerequisite, and it must be completed no later than the first Friday of the semester. Check department lists of courses to see where this is a prerequisite.
CH: 0
OR: only offered online; completion time estimated to be one hour
3000 Concepts, Methods and Issues in Science I - inactive course.
3001 Concepts, Methods and Issues in Science II - inactive course.
4000 Senior Science Seminar is a review of current topics in science discussed in a seminar format. Seminars will be presented by faculty, students and guest speakers.
PR:Permission of the Program Chair. This course is restricted to students in the General Science program who have completed 80 credit hours or more.

4950 Senior Project requires students to work either individually or in pairs on developing a poster presentation on specific scientific topics of current interest. This will require a detailed proposal, followed by the necessary relevant research in appropriate journals and Internet sources. Participants in this course will organize a mini-conference, to be held at the end of semester, at which these posters will be presented. Where appropriate, students will be encouraged to integrate knowledge from at least two different scientific disciplines in the development of this project.
PR: restricted to students in the General Science program who have completed 80 credit hours or more
4951 Honours Project $I$ is the preparation of a project proposal under the guidance of a faculty supervisor, including a comprehensive bibliographical review, with the aim of producing a well-annotated Bibliography.
PR: Permission of the Program Chair. This course is restricted to students in the General Science program who have completed 80 credit hours or more.

4959 Honours Project II is a continuation of SCI 4951. Under the supervision of a Faculty Advisor, students will prepare an Honours Thesis. The preparation of this will entail some original research, and will require the student to integrate knowledge from at least two disciplines.
PR: SCl 4951 and permission of the Program Chair

### 13.28 Social/Cultural Studies

Social/Cultural Studies courses are designated by SCCU.
2000 Introduction to Social/Cultural Studies introduces students to the theory and the intellectual and historical contexts of anthropology, folklore
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=\mathrm{Prerequisite(s);}$ UL = Usage limitation(s).
and sociology as the central academic foci of Social/Cultural Studies. Readings and lecture materials, drawn from each of the three disciplines, introduce students to core concepts, ideas and debates found within each cognate and the ways in which all three disciplines contribute to Social/ Cultural Studies as an interdisciplinary field of study.
2244 The Graphic Novel - Historical, Cultural and Literary Contexts (same as English 2244) examines the historical, cultural and literary impact of the Graphic Novel; investigates its continuing development; and introduces students to significant works within the genre.
CR: English 3842, English 2244
PR: 6 credit hours first-year English; one of Folklore 1000, Anthropology 1031, or Sociology 1000

4000 Interdisciplinary Seminar in Social/Cultural Studies is conducted through faculty presentations, assigned readings and group discussions and students will learn how to engage and evaluate the broad debates within Anthropology, Folklore and Sociology. Rather than focus on narrow substantive material from the disciplines, this seminar will emphasize the larger shifts and challenges which have led to new topics and methods of analysis within the social sciences.
PR: completion of 90 credit hours or more and admission to Social/Cultural Studies

4100 Issues in Cultural Studies represents an examination of the concept of culture, as it is presently used within Anthropology, Folklore and Sociology. Particular attention will be paid to the area of Cultural Studies, and the ways in which that approach has re-energized an interest in the role of culture in modern society.
PR: completion of 90 credit hours or more and admission to Social/Cultural Studies
4950 Independent Project in Social/Cultural Studies is under the supervision of a faculty member and students will independently carry out approved projects of direct relevance to social and cultural phenomena, and prepare reports of their findings.
PR: SCCU 4000

### 13.29 Sociology

Sociology 1000 is a prerequisite for all further Sociology courses except Sociology 2250 and those cross-listed with Anthropology. Credit is not given for both Sociology 1000 and the former Sociology 2000. Before taking 3000-level courses, students should have taken at least 6 credit hours in courses below the 3000 level. Courses at the 4000 level will normally be taken by students who have previously taken at least 9 credit hours in courses at the 3000 level.
The following courses, cross-listed with Anthropology and identified by the prefix "S/A", are also taught at the introductory level: 2200, 2210, 2220, 2230, 2240, 2260, 2270, 2280, and 2350. A minimum of two of these courses is prerequisite to further crosslisted courses. These courses are open to be taken as first courses or may be taken to follow up a Sociology introductory course.
Sociology courses are designated by SOCl
1000 Introduction to Sociology (same as the former SOCI 2000) is an introduction to the concepts, principles, and topics of Sociology. This course is a prerequisite to most departmental courses.
CR: the former SOCI 2000
2100 Social Inequality introduces the subject of social inequality and stratification, examines social inequality in historical perspective, reviews major theories about social inequality, and considers key social developments in contemporary societies in the area of social inequality.
2120 Technology and Society is an examination of the role of technology in society. Topics may include the emergence of modern technological society, the impact of new technologies on social organization and culture and the institutionalization of science and the production of scientific knowledge. The course also explores the ideological functions of science and technology in advanced industrial societies as well as the question of "the domination of nature".
2200 Communities (S/A) is an interdisciplinary examination of the concept of Community. Readings will include community studies from North America and Europe.
2210 Communication and Culture ( $\mathbf{S} / \mathbf{A}$ ) is an examination of verbal and non-verbal systems of communication, and the influence of language on human cognition.
UL: not applicable towards the Major or Minor in Anthropology
2220 Labrador Society and Culture is the sociology and anthropology of Labrador. The focus is on social and cultural aspects of contemporary

Labrador.
2230 Newfoundland Society and Culture (S/A) (same as Folklore 2230) is the Sociology and Anthropology of the Island of Newfoundland. The focus is on social and cultural aspects of contemporary island Newfoundland.
CR: Folklore 2230
UL: not applicable towards the Major or Minor in Anthropology
2240 Canadian Society and Culture (S/A) is a descriptive and analytic approach to the development of Canadian society and culture.
UL: not applicable towards the Major or Minor in Anthropology
2250 Changing World is sociological analysis of contemporary world issues and social problems.

2260 War and Aggression (S/A) is critical review of ethological, psychological and sociological approaches to the understanding of violence and organized aggression.

2270 Families (S/A) is a comparative and historical perspective on the family as a social institution, the range of variation in its structure and the determinants of its development.

2280 The City (S/A) examines varieties of urban life around the world and through history. The city as habitat and as spectacle.
2350 Religious Institutions (S/A) (same as Religious Studies 2350) is comparative study of religious institutions and beliefs, calendrical feasts and solemnities, religious roles and hierarchies, ritual innovation and revitalization.
CR: Religious Studies 2350
UL: not applicable towards the Major or Minor in Anthropology


3040 Introduction to the Methods of Social Research has as its' objectives (1) to introduce basic concepts underlying research in the social sciences, and (2) to make students familiar with some techniques that are useful in the analysis of a wide range of sociological data and that represent a good foundation for later study of more advanced techniques.

3140 Social Movements (S/A) examines the major social movements that have driven social changes related to gender equality, social justice, human rights, and the environment. The course asks why people become involved in social movements, and what factors contribute to movement success. The course also examines social movements' use of mass media and new media technologies as tools for reaching the public and provoking social and cultural transformation.
UL: not applicable towards the Major or Minor in Anthropology
3150 Classical Social Theory is an introduction to the work of major 19thand early 20th-century social theorists including Marx, Durkheim, Weber and Freud.
3160 Contemporary Social Theory is an exploration of selected topics from issues in contemporary social theory, including theories of feminism, the state, the environment, culture, organization, and communication.
PR: SOCI 3150
310
3210 Persistence and Change in Rural Society (S/A) assesses the social and cultural significance of the rural experience in the face of expanding urbanism. Topics may include (a) the nature of rural society in Canada, (b) similarities between Canadian and European rural society, c) utopian and anarchist movements in rural life, and (d) reaction of agricultural populations to external influence.

3290 Deviance is major sociological theories and methodological techniques central to the study of deviance and crime are outlined and evaluated. The distribution, attributes and explanations of a variety of forms of deviance are examined, which may include violence, sexual deviance, delinquency, addiction, mental disorder, theft, organized crime, political deviance and corporate deviance.

3314 Gender and Society (S/A 3314) is an examination of biological, psychological, social and cultural aspects of gender, with an emphasis upon contemporary directions of change in sex roles.

3395 Criminal Justice and Corrections provides an introduction to the operation of the Canadian criminal justice system. Topics to be examined may include the origin, nature and utilization of criminal law, policing, adult and juvenile courts, sentencing, correctional institutions, and community based corrections (probation, parole, community service). Criminal justice policy formulation and application are also discussed.
PR: SOCI 3290
3731 Sociology of Culture is a comparative examination of major contemporary sociological texts on the relationship between culture, broadly understood as symbolic systems, and social structure.

4071 Social and Cultural Aspects of Health and IIIness covers topics which may include: cultural concepts of illness and health; theories of

[^15]disease causation; relationships between social life and illness patterns; symbolic use of illness; variations in philosophies of treatment and in practitioner/patient relationships; the social organization of medicine. Open to those without normal prerequisites by permission of the Instructor.

4072 Social and Cultural Aspects of Death (S/A) will cover topics which may include: symbolic meanings and values attached to death; cultural and historical variations in the management of death, e.g. treatment of the 'terminally ill', burial rites, the mourning process, and the social fate of survivors, together with the social and psychological meanings of these behaviours. Open to those without normal prerequisites by permission of the Instructor.

### 13.30 Theatre

Theatre courses are designated by THEA.
1000 and 1001 Introduction to the History of Theatre I and II are historical surveys of the art of the theatre. The history of theatre will be studied in terms of the evolution of performance and of the physical theatre from their origins in a variety of social rituals and contexts through to their present plurality of forms. At the same time, the nature and function of the various components of theatrical performance (acting, directing, design, etc.) will be analysed in terms of period philosophical, social, cultural, political and religious contexts. These courses are open to non-theatre students.

1010 Introduction to Acting is an appreciation of the fundamentals of the craft of acting. Basic exercises in voice, movement, relaxation and concentration, improvisation and script analysis will introduce the student to the imaginative and physical skills required by an actor. This is a basic course for both Acting and Technical Theatre Production majors.
AR: attendance is required
OR: 6 hours of studio per week
1020 Introduction to Technical Theatre Production is an appreciation of the basic vocabulary and techniques of the various technical and organizational structures and practices of staging plays. Areas of concentration will include scenic and costume construction, basics in lighting, painting, props, sound and stage management. This is a basic course for both Acting and Technical Theatre Production majors.
$A R$ : attendance is required
OR: 6 hours of studio per week
1110 Acting $I$ is an introductory course for those majoring in acting. Emphasis on voice, speech, movement and text analysis. Various learning methods will be employed, from sensitivity exercises to improvisation and creative imagination exercises. Participation in in-class performance is required.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 1000, THEA 1010, and THEA 1020 and admission to the Theatre Major
1120 Technical Theatre Production Tis an introductory course for those majoring in Technical Theatre Production. Emphasis on the fundamentals of scenic carpentry, wardrobe, sound, lighting, crewing, painting and stage management.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 1000, THEA 1010, and THEA 1020
1200 Concert Dance is an overview of the basic techniques of Western concert dance such as jazz, ballet, and contemporary dance within their historical, cultural, and aesthetic contexts. The course develops basic body awareness and alignment and explores the basics of codified dance technique. This course is open to non-Theatre students.
AR: attendance is required
OR: 3 hours of studio per week
1250 Improvised Movement and Condifioning is an exploration of the basic development of healthy physical practice for movement training including conditioning and improvisation. Students will investigate body awareness, anatomy, self-expression, dynamic alignment, and the basic principles of creating movement-based performances. This course is open to non-Theatre students.
AR: attendance is required
OR: 3 hours of studio per week
2010 and 2011 Acting II are second level courses for Acting Majors. Emphasis is on speech, text analysis and scene study. Various techniques and texts will be employed to root the student in the fundamental process of acting. A beginning approach to understanding the body as an instrument and the techniques required to use the instrument.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 1001 and THEA 1110. THEA 2010 is a prerequisite for THEA
2011 and admission to the Acting Major
2020 and 2021 Technical Theatre Production II are second level courses
for the Technical Theatre Production Major. Emphasis is on the fundamentals of drafting, stage management and props development.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 1001 and THEA 1120. THEA 2020 is a prerequisite to THEA 2021
2080 and 2081 Production Acting both involve practical work in each case work for Acting Majors in a theatre department production.
$A R$ : attendance is required
CH : 4 credit hours each
OR: 12 hours of studio per week
PR: THEA 1110
2090 and 2091 Production - Technical Theatre both involve practical work for Technical Theatre Production Majors, in a departmental production in a supporting capacity (i.e. assistant stage manager, wardrobe assistant, etc.).
AR: attendance is required
CH: 4 credit hours each
OR: 12 hours of studio per week
PR: THEA 1120
3010 and 3011 Acting III are intermediate level courses for the Acting Major. Continued emphasis on speech, voice production, text analysis, etc. AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 2010 and THEA 2011, THEA 2080 and THEA 2081
3020 and 3021 Technical Theatre Production III are intermediate courses for Technical Theatre Production Majors. Continued emphasis on carpentry, painting, lighting, sound, wardrobe, stage management, etc.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 2020 and THEA 2021, THEA 2090 and THEA 2091
3060 and 3061 Master Classes I and II (Technical Theatre Production) are courses for Technical Theatre Production students with a guest artist in a particular area of specialization.
$A R$ : attendance is required
OR: 6 hours of studio per week
PR: THEA 2020 and THEA 2021, THEA 3060 is a prerequisite for THEA 3061
3070 and 3071 Master Classes I and II (Acting) are courses for Acting students with a guest artist in a particular area of specialization.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 2010 and THEA 2011. THEA 3070 is a prerequisite for THEA 3071
3080 and 3081 Production - Acting both involve practical work in each case work, for Acting Majors on a department of theatre production.
AR: attendance is required
CH : 4 credit hours each
OR: 16 hours of studio per week
PR: THEA 2010 and THEA 2011, THEA 2080 and THEA 2081
3090 and 3091 Production - Technical Theatre both involve practical work, for Technical Theatre Production Majors on a departmental production in a significant capacity (i.e. stage manager, crew chief, head of props, etc.).
AR: attendance is required
CH : 4 credit hours each
OR: 16 hours of studio per week
PR: THEA 2020 and THEA 2021, THEA 2090 and THEA 2091

## 3605 Music Theatre Workshop - inactive course.

4001 Theatre Institute at Harlow is a full semester's work, utilizing both the Harlow Campus and Grenfell Campus, comprising a "thesis production" involving fourth-year acting and stagecraft students in major responsibilities. A practical component in Theatre Criticism utilizing the resources of the Harlow Campus proximity to London and Stratford. A series of Master Classes, Workshops, Field Trips and Guest Lectures offered by members of the theatre profession in England. A project in a selected area of theatre history.
AR: attendance is required
CH: 10
PR: THEA 4010 or THEA 4020 , THEA 4060 or THEA 4070, THEA 4080 or THEA 4090, THEA 4030, THEA 4040

4010 Acting IV is an advanced course for acting majors. Concentration on advanced scene study on texts illustrating period styles or genres of plays.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 3010 and THEA 3011, THEA 3080 and THEA 3081
4020 Technical Theatre Production IV is an advanced course for Technical Theatre Production Majors with individual concentration on specific technical skills.
$A R$ : attendance is required
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

OR: 6 hours of studio per week
PR: THEA 3020 and THEA 3021, THEA 3090 and THEA 3091
4030 Theory of Directing and Design is an examination and analysis of the nature and practice of directing and design from a theoretical and aesthetical perspective. A lecture/seminar course involving script analysis to examine the interpretive and imagistic processes of directors and designers.
OR: seminar 3 hours per week
PR: THEA 3010 and THEA 3011 or THEA 3020 and THEA 3021, Visual Arts 2700 and Visual Arts 2701, and 18 credit hours in Dramatic Literature courses

4040 Directed Studies are student projects in playmaking, performance, directing, design or technical presentations supervised by faculty. In consultation with the faculty, the student will submit a proposal for a project on which the student wishes to work. These projects will be presented in public.
OR: 6 hours of studio per week
PR: THEA 3010 and THEA 3011 or THEA 3020 and THEA 3021 and admission to the Theatre Major

4060 Master Class III (Technical Theatre Production) is advanced work with a guest artist in a particular area of specialization.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 3060 and THEA 3061
4070 Master Class III (Acting) is advanced work with a guest artist in a particular area of specialization.
AR: attendance is required
OR: 6 hours of studio per week
PR: THEA 3070 and THEA 3071
4080 Production-Acting is work for Acting Majors on a theatre department production.
AR: attendance is required
CH: 4
OR: 20 hours of studio per week
PR: THEA 3010 and THEA 3011, THEA 3080 and THEA 3081
4090 Production - Technical Theatre is practical work for Technical Theatre Production Majors on a departmental production in a significant and leading capacity (i.e. designer, stage manager, technical director, etc.)
AR: attendance is required
CH: 4
OR: 20 hours of studio per week
PR: THEA 3020 and THEA 3021, THEA 3090 and THEA 3091

### 13.31 Tourism

Tourism courses are designated by TRSM.
1000 Introduction to Tourism introduces students to the history of tourism and leisure, and the development of the field of tourism studies. This will include consideration of foundational concepts such as culture and nature, research on the needs and gratifications of tourists, and studies of the functions of tourism.

2000 Tourism and Sustainability investigates the concept of sustainability and focuses on the importance of sustainable tourism initiatives, covers measuring the demand for tourism, the role of government and industry stakeholders in the tourism planning process, and a consideration of how tourism planning strategies are developed, implemented, evaluated, and controlled. In addition, there will be an examination of the principles that structure the tourism industry.
PR: TRSM 1000 or permission of the instructor
3010 Issues in Ecotourism - inactive course.
3230 Parks and Protected Areas examines the history and geography of national parks and other publicly protected lands, and considers the impact of human interaction with landscapes. Additionally, the course will focus on tourism planning and management in national parks and protected areas, and investigate guidelines for best practice in tourism operations.
PR: TRSM 1000 or permission of the instructor
3240 Cultural and Heritage Tourism Development considers built, natural and cultural resources for heritage tourism destinations on a variety of scales from World Heritage Sites to countryside and rural tourism attractions. Issues around the international context of heritage, interpretation, and packaging of cultural heritage products, regional identities and environments and the importance of small and medium sized enterprises are examined.
PR: TRSM 1000 or permission of the instructor
3900 Global Issues and Tourism highlights the importance of responding to world issues in tourism, and considers issues around socio-politicalenvironmental factors influencing tourism, the impact of new social movements on tourism, the demographics and psychographics of travellers, the promotion of culture and territories, and the globalization of tourism.

PR: TRSM 1000 or permission of the instructor
4010 Community and Cultural Issues in Tourism - inactive course
4900-4910 (Excluding 4902) Special Topics in Tourism is a case-based course focussing on the application of major tourism theories and concepts to modern tourism industry issues. Potential areas of consideration include transportation issues in tourism, visitor management, rural tourism, urban tourism, health tourism and therapeutic recreation, island tourism, critical regionalism, maximizing the year-round potential of tourism, and contemporary research in tourism.
PR: at least 75 credit hours or permission of the instructor
4902 Culinary Tourism examines the history of gastronomy and the role of food in cultural heritage with different case studies around the world. Wine growing regions from countries such as Canada, France, Italy, Hungary, South Africa, Greece, and Cyprus will be critically analyzed from an economic impact context. Trends in cuisine and culinary arts, successes and challenges in promoting food tourism in Newfoundland food and drink in literature, art and film, and food and wine tourism best practices will be a key focus. The students will be required to take local tours of selected restaurants and wineries in Newfoundland for practical exposure of the food and wine industry.
PR: at least 75 credit hours or permission of the instructor

### 13.32 University

1010 The University Experience introduces students to the different modes of enquiry that one finds in the University, the interrelatedness of knowledge and the role of the University in society. It also provides students with tools and techniques of study and research that can lead them to academic success and fulfilling career.

### 13.33 Visual Arts

Visual Arts courses are designated by VART.

### 13.33.1 1st Year

1000 Introduction to Two-Dimensional Art Practices provides an introduction to two-dimensional art practices with selections made from drawing, paînting, and printmaking. Design elements and principles, aesthetic concerns, the study of colour, and fundamental concepts of a variety of two-dimensional media, materials and processes will be explored. Ways of describing, analyzing, interpreting and assessing art will be examined. This course is open to both visual arts and non-visual arts students.
AR: attendance is required
CO: VART 1911
CR: the former VART 1510 and the former VART 1511
OR: 4 hours of studio per week
1001 Introduction to 3D, Photo and Time-based Art Practices provides an introduction to 3D, photo and time-based art practices with selections from sculpture, installation, photo-media, time-based art and related practices. Design elements and principles, postmodern strategies, aesthetic concerns, and fundamental concepts of a variety of media, materials, and processes will be explored. Ways of appreciating art and artistic processes will be examined. This course is open to both visual arts and non-visual arts students.
AR: attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1010 Introduction to Drawing introduces the fundamentals of drawing with study of line, tone, shape, volume, form, texture and space. This course includes practice-based research methodologies.
AR: attendance is required
CO: VART 1911
CR: the former VART 1500
OR: 4 hours of studio per week
1110 Painting: Colour, Materials, and Processes introduces the concepts, principles, and processes of painting. Students will be introduced to paint mediums, materials, and tools with a focus on colour, all within the context of contemporary art practices.
AR: attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1210 Introduction to Sculpture introduces the exploration of threedimensional form, sculpture materials and processes, and of the organization of relationships and interactions between objects and space.
AR: attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1310 Printmaking: Relief and Screenprinting introduces visual language
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
and concepts in conjunction with printmaking methods, materials and techniques via projects in relief and screenprinting.
AR: attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1410 Photography introduces the theory and technique of photography using the digital camera and its controls and incorporating the use of Photoshop for photography. The course also introduces theories and genres of photographic vision, the use of the medium to explore a personal vision, image editing, and service bureau printing.

AR: attendance is required
CO: VART 1911
CR: the former VART 2400
OR: 4 hours of studio per week
1522 Textile and Fibre Art explores various textile and fibre materials and processes used in contemporary art studio practice.
AR: attendance is required
CO: VART 1911
CR: the former VART 1520
OR: 4 hours of studio per week
1610 Introduction to Computers and Art provides an initial exploration of how computational technology can be a creative tool applied to all creative practices involving the essential applications for imaging and dissemination. The course includes but is not limited to, vector illustration, photo manipulation, digital painting and use of presentation technologies. A key notion in this course is that of personal workflow approaches.
$A R$ : attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1810 Introduction to Time-Based Art introduces students to art practices that employ time, such as animation, video, sound art, and live art. This course may include attendance at screenings, performances, and/or visiting artist presentations outside of class time. This course includes practicebased research methodologies.
AR: attendance is required
CO: VART 1911
OR: 4 hours of studio per week
1911 Fine Arts Health and Safety provides an overview to the culture and practice of health and safety in studio courses, as well as giving students information that will help them succeed at Grenfell Campus. This component is delivered through a series of workshops, demonstrations, lectures, and online training. The course includes: WHMIS, Personal Protective Equipment, art materials safety, basic First-Aid, studio protocols, tours and lectures to acquaint students with campus resources, and the purchase of a safety kit, WHMIS fees, and a course manual. This course is a co-requisite for all 1000 level studio courses. This is a pass/fail course and requires attendance at all sessions and completion of all online components.
$A R$ : attendance is required
CH: 0
OR: 12 contact hours and supplementary online components

### 13.33.2 2nd Year

2010 Drawing explores drawing through a range of materials, processes, and concepts. This course leads toward the investigation of student-initiated ideas and concepts, as well as comprehension of drawing in contemporary practices. Some drawing fundamentals are also covered. This course includes practice-based research methodologies.
$A R$ : attendance is required
CR: the former VART 2000 and the former VART 2001
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2011 Expanded Field explores the territory beyond conventional boundaries of discipline-based practices.
$A R$ : attendance is required
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2110 Painting: Process and Materiality introduces painting with emphasis
on materials, processes and ideas within a contemporary painting context.
AR: attendance is required
CR: the former VART 2100 and the former VART 2101
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2111 Painting: Themes and Practices emphasizes thematic development and practice in painting. This course includes practice-based research methodologies.
AR: attendance is required
CR: the former VART 2100 and the former VART 2101
OR: 4 hours of studio per week
PR: 24 credit hours in VART

2210 Sculpture I develops accurate and expressive control of threedimensional media with an emphasis on areas such as formed sculpture and installation/site-specific sculpture.

AR: attendance is required
CR: the former VART 2200
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2211 Sculpture II develops accurate and expressive control of threedimensional media with an emphasis on areas such as carved sculpture and constructed sculpture.

AR: attendance is required
CR: the former VART 2201
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2311 Intaglio Printmaking provides intensive exploration of Intaglio Printmaking materials and media applied to development of visual communication skills, conceptual breadth and personal expression. This course is normally offered in alternating years.
AR: attendance is required
OR: 4 hours of studio per wee
PR: 24 credit hours in VART
2321 Lithographic Printmaking provides intensive exploration of Lithographic Printmaking materials and media applied to development of visual communication skills, conceptual breadth and personal expression. This course is normally offered in alternating years.

AR: attendance is required
OR: 4 hours of studio per week
PR: 24 credit hours in VART
$\mathbf{2 3 3 0}$ Print Media introduces contemporary printing technologies as applied to the development of personal expression. The course is designed to develop the students' critical awareness of print media while building technological, conceptual and visual communication skills. Technologies to be introduced include integration of computer or digital processes and photomechanical methods.
$A R$ : attendance is required
CR: the former VART 3300
OR: 4 hours of studio per week
PR: 24 credit hours in VART including 3 credit hours from any of VART
$1310,1410,1610,2311,2321,2410,2411,2610,2611$
2410 Photography I introduces students to film cameras, lenses, and their controls to produce film negatives for printing in the traditional black and white darkroom. Topics covered include negative scanning, large-format digital printing for exhibition, the use of Photoshop for photography, the examination of photo-theory, critical reading and critical evaluation of photographs. Students are encouraged to explore a personal vision. Studio time is balanced with regular illustrated lectures on the theory and history of the first century of photography.
AR: attendance is required
CR: the former VART 3400
OR: 4 hours of studio per week
PR: 24 credit hours in VART
2411 Photography II continues the use of digital and/or film cameras to produce files and/or film negatives for printing in the traditional darkroom and/or digital lab. The theory and aesthetics of photography is addressed through critiques, readings and lectures. Students are encouraged to strengthen their personal vision. Studio time is balanced with regular illustrated lectures on the theory and history of the medium since the 1930's, with emphasis on contemporary photographic practitioners.
$A R$ : attendance is required
CR: the former VART 3401
OR: 4 hours of studio per week
PR: VART 2410
2610 Introductory Projects in New Media encourages individualized investigation in the potential and possibilities of New Media in the creation of personal artistic works. Techniques for working with vector and pixel based software are demonstrated with the goal of encouraging students to find their own particular approach to a New Media workflow applied to various mediums. Blended and alternative learning approaches are used.
AR: attendance is required
OR: 4 hours of studio per week
PR: 3 credit hours in VART
2611 New Media - Motion and Media explores motion as a tool for expression and visual practice. Students are instructed in the use of tools for editing sound and motion (e.g. video, animation) with the goal of studying motion as a medium independent from the tools for production. Initial readings on theories of affect are combined with technical demonstrations to enhance notions of cross-fertilization between approaches and practices. Blended and alternative learning approaches will be used.
AR: attendance is required
OR: 4 hours of studio per week
PR: 3 credit hours in VART
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

2900-2909 Special Topics in Visual Arts introduces a range of introductory topics that might include: Textile Practices, Japanese Woodblock, and Book Arts.
AR: attendance is required
OR: 4 hours of studio per week
PR: 24 credit hours in VART

### 13.33.3 3rd Year

3110 Drawing/Painting Studio Art Practice explores various approaches to contemporary drawing and painting practices. This course includes practice-based research methodologies.
AR: attendance is required
OR: 4 hours of studio per week
PR: 6 credit hours from any of VART 2010, VART 2011, VART 2110, VART 2111
3210 Extended Practice in Sculpture, Space and Installation develops independent artistic and personal expression utilizing areas of expression such as sculpture, definition and articulation of space and site; and the creation and presentation of three-dimensional media through the use of installation.
AR: attendance is required
OR: 4 hours of studio per week
PR: VART 2210 and VART 2211
3310 Extended Practice in Printed Multiples hones skills in any of printmaking, print media, digital output, multiple producing print processes and printed matter while developing a self-directed body of work. The use of these processes will be selected by students in consultation with the instructor. Students can focus on the tradition of printmaking or print media or an interdisciplinary production. The creation of printed physical output is emphasized. This course includes practice-based research methodologies.
AR: attendance is required
CR: the former VART 3301
OR: 4 hours of studio per week
PR: 3 credit hours chosen from VART 2311 or VART 2321, VART 2330, VART 2411

3350 Directed Studies in Printmaking is a professional work/study experience in Printmaking. Students will undertake their own projects in Printmaking. In addition, they will assist the Director and/or Master printer at St. Michael's Printshop in St. John's, NL in the day-to-day operations of the studio. Students are required to write a paper on an aspect of Printmaking as it pertains to St. Michael's Printshop. Normally this course is available during Spring Session only (May to mid-August) so that students can experience the complete summer activities scheduled at St. Michael's.
PR: 6 credit hours chosen from VART 1310, VART 2311, VART 2321
VART 2330 and permission of the Program Chair
3410 Extended Practice in Photography continues exploration in photographic/digital output by creating self-directed, coherent bodies of work. These explorations build toward the production of suites, folios, and/or sequences in print installations, webpages, apps, and/or physical photobook. Independent practice and ongoing research of process, structure, content and sequence are major components of the term's work. This course includes practice-based research methodologies.
AR: attendance is required
CR: the former VART 3401
OR: 4 hours of studio per week
PR: VART 2411
3520 Intermediate Practice in Textile and Fibre Art explores the expressive potential of textiles and fibre materials and processes.
AR: attendance is required
OR: 4 hours of studio per week
PR: 48 credit hours in VART
3610 Computational Media explores process-based New Media for the production of spectacle. Students produce an independent body of work using computational media (e.g. projection, audio, installation) to create experiences designed for an audience. Instrumental to this process is the study of New Media theory concurrent with the development of software/ programming skills, allowing space for any and all tools of expression. Blended and alternative learning approaches are used. This course is normally offered in alternating years.
AR: attendance is required
OR: 4 hours of studio per week
PR: 48 credit hours in VART
3611 Making Art in the Age of Theory explores the intersection of creative practice and theory. Making artwork is a continuous exchange between studio practice and consideration of the social. Through the reading and discussion of influential texts and the exploration of related works and artists, students work with the tools of their choice to create art. Blended and alternative learning approaches are used. This course is normally offered in alternating years.
AR: attendance is required
OR: 4 hours of studio per week

PR: 48 credit hours in VART
3810 Intermediate Time-Based Practice emphasizes concepts, media, and practices related to contemporary art that employ time. Students choose to work with performance, audio, video, relational art, interdisciplinary practices, new media and more. This course may include screenings, performances, and presentations and practice-based research methodologies.
AR: attendance is required
OR: 4 hours of studio per week
PR: 48 credit hours in VART
3821 Open Studio develops individual studio practice and research applied to the production of a self-directed body of work or project. Students work in a discipline or disciplines of their choice, or in an interdisciplinary way. Students define their research and creation based on a proposal, in consultation with their instructor. This course includes practice-based research methodologies.
AR: attendance is required
OR: 4 hours of studio per week
PR: 6 credit hours chosen from VART 3110 , VART 3210, VART 3310 ,
VART 3350, VART 3410, VART 3520, VART 3610, VART 3611,
VART 3810
3850 Experiential Learning: Community Engagement in the Arts is a directed-studies course that provides students with the opportunity to apply their course-based knowledge in a community context. Under the guidance of their visual arts faculty supervisor, students work with a relevant community partner or on a community-based arts project. This course includes practice-based research methodologies.
AR: attendance is required
PR: 48 credit hours in VART and permission of the Program Chair
3900-3929 Special Topics in Visual Arts introduces a range of intermediate topics that might include: Ideas of Landscape, Word and Image, Installation, Performance, Art and the Environment, Non-Silver Photographic Processes, Book Arts.
$A R$ : attendance is required
OR: 4 hours of studio per week
PR: 48 credit hours in VART

### 13.33.44th Year

4800 Senior Studio Seminar and Professional Practices I focuses on building skills in the understanding and articulation of concepts, research, theory and practice involved in studio work. There are reading, research and writing components, including a support document. The course covers topics in a range of professional practices needed in the visual arts field, including preparation for graduate school. Visual Arts faculty and visitors offer presentations specific to their areas of expertise.
OR: 4 hours of studio per week
PR: 72 credit hours in VART
4801 Senior Studio Seminar and Professional Practices II continues the process of building skills in the understanding and articulation of concepts, research, theory and practice involved in studio work. Course components include reading, research, writing and preparation for the graduating exhibition. This course covers topics in a range of professional practices with a focus on preparation for a professional visual arts career. Visual Arts faculty and visitors offer presentations specific to their areas of expertise.
OR: 4 hours of studio per week
PR: VART 4800
4900-4929 Special Topics in Visual Arts introduces a range of senior topics that might include: Photo Journalism, Art and Politics, Community Practices, Environmental Practices.
AR: attendance in required
OR: 4 hours of studio per week
PR: 48 credit hours in VART
4950 Independent Senior Studio I develops an independent body of work and a related practice-based research methodology component under the supervision of a visual arts faculty advisor. Students attend regular meetings with their faculty advisor. Students are required to submit work at two critiques with visual arts faculty other than the student's advisor. Students present the body of work and associated practice-based research methodology component to their advisor at the end of semester.
AR: attendance is required
CO: VART 4800
PR: 72 credit hours in VART
4951 Independent Senior Studio II produces an independent body of work and a related practice-based research methodology component under the supervision of a visual arts faculty advisor. Students attend regular meetings with their faculty advisor. Students are required to submit work at two critiques with visual arts faculty other than the student's advisor. Students present the final body of work and associated practice-based research methodology component to their advisor at the end of semester.
AR: attendance in required
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

### 13.33.5 Art History

The prerequisite for all 3000-level courses is VART 2701 or History 1101 or permission of the Chair, Visual Arts.
No students shall register in any course having an initial digit "4" unless they have successfully completed at least 6 credit hours in Art History courses or by permission of the Chair, Visual Arts.
2700 Art History Survey I (same as History 2700) is the history of art from pre-historic times to the Renaissance.
CR: History 2700
2701 Art History Survey II (same as History 2701) is the history of art from the Renaissance to the twentieth century.
CR: History 2701
3620 Philosophy of Art is an introduction to aesthetics; applications in Visual Arts, music and drama.
CR: Philosophy 2360 or the former 3620
3700 Art History: The Italian Renaissance (same as History 3700) is an overview of the art and architecture of Renaissance Italy with an emphasis upon the historical context in which art was produced.
CR: History 3700
3701 Art History: The Renaissance Outside Italy (same as History 3701) is the Renaissance outside Italy from the late fourteenth century and the International style through the 16th century. As with the Italian Renaissance the art and architecture will be discussed in its historical context.
CR: History 3701
3702-3721 Art History: Special Topics has a range of special topics which might include: Early Renaissance Art, Art of the Later Renaissance, Canadian Art to 1900, 20th C. Canadian Art, American Art to 1900, History

Context and Modern Users.
3820 Religion and the Arts (same as Religious Studies 3820) is an examination of the role of art in the expression of religious ideas, together with a study of specific religious themes and concerns in one or more of the following: literature, film, music, painting, sculpture, and dance.
CR: Religious Studies 3820
PR: Religious Studies 2810 or permission of the Department of Religious Studies

4700-4729 Art History: Special Topics has a range of senior topics which might include: British Art and Architecture, Modern Art, Modern Art II, Aesthetics, 17th and 18th Century Art, 19th Century Art, Research Project in Modernism.

4730 Art History: Modern Art I: Precursors to Modernism (same as History 4730) is an examination of the cultural, social, and political forces which, from 1750 to 1850, were to have a major impact on modernity and later modern art.
CO: 6 credit hours in Art History or permission of the Chair of the Visual Arts program
CR: History 4730
PR: 6 credit hours in Art History or permission of the Chair of the Visual Arts program
4731 Art History: Modern Art II: Early Modernism (same as History 4731 is an examination of the various cultural and social forces between 1850 and
1914 which shaped the rise of the Modern movement.
CO: 6 credit hours in Aft History or permission of the Chair of the Visual Arts program
CR: History 4731
PR: 6 credit hours in Art History or permission of the Chair of the Visual Arts program

4740 Current Issues in Art inactive course.
4741 Art Criticism - inactive course.




SCHOOL OF HUMAN KINETICS AND RECREATION

## SCHOOL OF HUMAN KINETICS AND RECREATION

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www.mun.ca/hkr
Dean
Rohr, L.E., B.Sc.(Hons.), M.Sc., Ph.D. Waterloo; Associate Professor
Up-to-date personnel listings are available at www.mun.ca/hkr/contact.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 School Description

The School of Human Kinetics and Recreation offers undergraduate and graduate degrees in kinesiology, physical education, and recreation. The School's programs prepare students to meet societal needs for professionals who are able to initiate and manage health and lifestyle-enhancing programs. The School encourages a close working relationship among students, faculty, and staff, and with local and national sport, health, and professional organizations. The co-operative education program provides for the integration of academic and professional knowledge. A full-time academic program officer within the School assists students with decisions related to their academic program. The School prides itself on the extent to which senior undergraduate and graduate students are engaged in teaching, research, and scholarly activity. Many graduates of the School are leaders in the fields of physical education, sport, kinesiology, health, and recreation.
Additional information regarding the School of Human Kinetics and Recreation is available at www.mun.ca/hkr.
Students must meet all regulations of the School in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS. For information concerning fees and charges, see the Finâncial and Administrative Services website at www.mun.ca/finance/fees/.
For information concerning scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

## 4 Description of Programs

All courses of the School are designated by the abbreviation HKR.

### 4.1 General Degrees

The School of Human Kinetics and Recreation offers five degrees in four program areas. For specific details on each degree refer to the appropriate Program Regulations- General and Honours Degrees.

### 4.1.1 Human Kinetics and Recreation (Co-operative) Degree

A Human Kinetics and Recreation (Co-operative) degree is designed to prepare graduates for careers in a variety of health-related professions, including, but not limited to, health promotion, kinesiology, community and therapeutic recreation, fitness, health and wellness, and lifestyle professions. The Bachelor of Human Kinetics and Recreation (Co-operative) degree is comprised of 120 credit hours and three work terms and shall normally be completed on a full-time basis.

### 4.1.2 Kinesiology Degree

A Kinesiology degree is designed to prepare graduates for careers in ergonomics, fitness, health and wellness, and lifestyle professions. The kinesiology degree program consists of School courses in addition to a flexible choice of complementary study courses. The Bachelor of Kinesiology degree is comprised of 120 credit hours and can be taken on a full-time or part-time basis.

### 4.1.3 Physical Education Degree

A Physical Education degree is designed to prepare graduates for careers in teaching and related areas.
The Bachelor of Physical Education degree is comprised of 120 credit hours and can be taken on a full-time or part-time basis. This program is offered in the teaching and general options.

1. The Teaching Option contains courses in the fundamentals of physical education as well as courses in curriculum planning, teaching methods, and pedagogy relevant to physical education curricula for various grade levels. Within the teaching option students will be placed in an educational setting for some of the course work. Following completion of a physical education degree - teaching option, a student wishing to teach in a school setting normally completes an intermediate/secondary degree program offered by the Faculty of Education. For information regarding admission requirements to the intermediate/secondary programs refer to the Faculty of Education section of this Calendar.
2. The General Option is designed to provide basic professional preparation. The general option of the program consists of courses common to the teaching option plus a flexible choice of complementary study courses in place of the required curriculum and methods course

### 4.1.4 Recreation Degree

A Recreation degree is designed to provide students with the opportunity to develop professional competencies in recreation and leisure service management. The optional therapeutic recreation pathway provides professional preparation for the practice of therapeutic recreation. The Bachelor of Recreation degree is comprised of 120 credit hours and can be taken on a full-time or part-time basis.

### 4.2 Honours Degrees

An Honours degree signifies superior academic achievement with specific course work in kinesiology, physical education, and recreation programs. To be considered for an Honours Degree, the student must so indicate on the prescribed "Application for Graduation " form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation For further information on honours degrees see Program
Regulations - General and Honours Degrees.

### 4.3 Complementary Study Courses

Complementary study courses provide students the opportunity to avail of interdisciplinary learning to prepare graduates to serve the present and future needs of individuals and communities in a variety of professional settings related to health and wellness. This complements the expertise and skills developed and practiced in all components of a degree from the School of Human Kinetics and Recreation.

### 4.4 Work Terms in the Co-operative Program

Students registered for work terms are also governed by the Co-operative Student Handbook. Prior to registering for the first work term, students must successfully complete the non-credit Professional Development Seminar course.

### 4.4.1 General Information

- During work terms students are brought into direct contact with the kinesiology, physical education, and recreation professions, exposed to the work place setting, expected to assume ever-increasing responsibility in employment situations as their education advances, and introduced to experiences beyond the scope of those which could be provided in the classroom.
- Students are responsible for finding suitable work placements. The Co-operative Education Office of the School provides resources to assist in this process.
- In addition to a work term, students may register for up to 6 credit hours, although they are advised to consult the School's Academic Program Officer.
- Students are not permitted to drop work terms without prior approval of the Committee on Undergraduate Studies and with the recommendation of the Co-operative Education Office of the School. Students who drop a work term without permission, or who fail to honour an agreement to work with an employer, will be assigned a grade of FAL (fail) for that work term.
- Students who conduct themselves in such a manner as to cause their termination from the job, will be assigned a grade of FAL (fail) for that work term.
- Students are expected to maintain professional ethics, including confidentiality.


### 4.4.2 Work Term Reports

- A work term report, on a topic approved by the Co-operative Education Office of the School, must be submitted for each work term. The report must be approved by the employer and submitted by the student to the Co-operative Education Office of the School on or before the appropriate deadline in the University Diary.
- Late work term reports will not be evaluated unless prior permission for a late work term report has been granted by the Cooperative Education Office of the School.


### 4.4.3 Evaluation of Work Terms

- Two components are considered in work term evaluation: on-the-job performance and the work term report. Each component is evaluated separately and equally. The overall evaluation of work terms will result in the assignment of one of the following letter grades: PWD (pass with distinction), PAS (pass) or FAL (fail).


### 4.5 Undergraduate Online Resource

Additional information about the undergraduate program, individual courses and suggested timetables can be found in the School of Human Kinetics and Recreation Undergraduate Online Resource which is available at www.mun.ca/hkr.

### 4.6 Course Restrictions

1. Students should be aware of a number of credit restrictions. For further information see the Human Kinetics and Recreation course descriptions section found under Course Descriptions.
2. Course prerequisites for all courses shall apply.

## 5 Admission/Readmission Regulations for the School of Human Kinetics and Recreation

In addition to meeting the UNIVERSITY REGULATIONS students must meet the Admission/Readmission Regulations for the School of Human Kinetics and Recreation.

### 5.1 General Information

1. Entry to programs offered by the School is competitive for a limited number of placements. Meeting the minimum requirements for admission does not guarantee acceptance into the program. The final decision on admission rests with the Admissions Committee of the School
2. Admission or readmission to the University does not necessarily constitute admission or readmission to any program.
3. Up to three positions per year in the School of Human Kinetics and Recreation may be designated for applicants of aboriginal ancestry who have met the admission requirements of the program. Applicants must send a letter of request to hkr_registrar@mun.ca at the time of application and provide documentation of aboriginal ancestry.

### 5.2 Application Forms and Deadlines

1. All programs of the School commence in the Fall semester. The deadline for application for admission is March 1
2. The deadline for application for readmission, for students who were previously admitted to a School of Human Kinetics and Recreation program, is June 1 for the Fall semester, October 1 for Winter, and February 1 for Spring.
3. The application for admission or readmission to programs offered by the School of Human Kinetics and Recreation is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.
4. In addition to the application, students applying to the physical education programs must:

- submit a 250 word autobiographical statement highlighting the applicant's experiences of teaching and learning and demonstrating a commitment to leading a physically active lifestyle. Further information is available from the School's website at www.mun.ca/hkr, and
- submit a current first aid certificate, and
- complete the School's swim test. Students applying from outside St. John's should call the School's General Office at (709) 8648130 to contact the swim test co-ordinators to arrange for testing. In lieu of the School swim test, a level 8 Red Cross or other credential satisfactory to the School may be accepted. Students unable to complete the swim test requirement before beginning their program must successfully complete this requirement by the end of October of their first semester of admission to the program. Failure to do so will result in the student being required to withdraw from the program at the end of their first semester.


### 5.3 Admission Requirements to the School of Human Kinetics and Recreation Programs

Applicants may apply for admission to School programs under the Categories Of Applicants, Admission Criteria and Other Information outlined under UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate). In addition to meeting these regulations, applicants in the following categories, other than those applying for admission to the Bachelor of Recreation degree program, must meet the additional requirements as indicated below.

### 5.3.1 High School Applicants

- High school applicants to the kinesiology degree programs must have completed:
- Level III Laboratory Science with a grade of at least $70 \%$, and one of
- Level III Academic or Advanced Mathematics and have met the required prerequisites to register for one of Mathematics 1090, 109A/B or 1000. For further visit www.mun.ca/math.


### 5.3.2 Memorial University of Newfoundland Applicants

- To be eligible for consideration for admission to all programs, students who are attending or have previously attended this University must have a cumulative average of $60 \%$ or an average of $65 \%$ on their last 30 credit hours.
- Overall academic performance is an important criterion in reaching decisions on applications for admission, and will be considered, in the selection process.
- Students who are attending or have previously attended this University are not required to submit a copy of their transcript with their application(s).


### 5.3.3 Transfer Applicants

- Applicants seeking admission through transfer from accredited post-secondary institutions must have achieved a minimum overall average of $60 \%$ to be considered for admission.
- A student's placement within a program, and requirements needed to complete the program, will be determined on an individual basis at the time of admission. No applicant will be granted placement beyond Academic Term 4.
- Transfer applicants must request that an official transcript showing any completed courses and current registrations be forwarded to the Office of the Registrar. Final transcripts must be submitted upon receipt of final grades.
- A minimum grade of $60 \%$ (or equivalent) is required in an equivalent course taken at an institution other than Memorial University of Newfoundland in order to be considered for transfer credit for any HKR course.
- Transfer credit cannot be awarded for the following courses: HKR 3110, HKR 399W, HKR 4605, HKR 4610, HKR 4785, HKR 499W.


### 5.4 Other Information

1. The School will notify applicants regarding an admission decision to a School program.
2. Students admitted to a program at any level beyond Academic Term 1, without successfully completing all courses required up to that level, must successfully complete those courses prior to the end of their last academic term. Successful completion shall mean a minimum grade of $50 \%$ in every non-HKR course and a minimum grade of $60 \%$ in every HKR course.
3. Students who have been admitted to one program offered by the School and who wish to change to another program within the School must submit a new application for admission to the program. This application must be submitted to the Office of the Registrar by the March 1 deadline date and will be considered in competition with all other applications.
4. Students admitted full time to a program and who decline the offer of admission or who fail to register for courses during the Fall term of admission will be considered withdrawn from the program. Such students, if they subsequently wish to be considered for admission, must submit a new application for admission to the program. This application must be submitted to the Office of the Registrar by the March 1 deadline date and will be considered in competition with other applications.
5. Students admitted part time to a program and who decline the offer of admission or who fail to register for courses and fail to successfully complete at least 6 credit hours applicable to the degree during each academic year will be considered withdrawn from the program. Such students, if they subsequently wish to be considered for admission, must submit a new application for admission to the program. This application must be submitted to the Office of the Registrar by the March 1 deadline date and will be considered in competition with other applications.
6. While the School of Human Kinetics and Recreation does not require criminal record checks or other screening procedures as a condition of admission to its program, Physical Education students may be required by a school district to submit a Certificate of Conduct before placement in a school setting, such as HKR 3110. Students are encouraged to seek the Certificate of Conduct before registration in HKR 3110. Each Physical Education student is responsible for obtaining a Royal Newfoundland Constabulary or Royal Canadian Mounted Police Certificate of Conduct at the student's own expense. Details are available from the General Office of the School of Human Kinetics and Recreation.

## 6 Program Regulations - General and Honours Degrees

### 6.1 Bachelor of Human Kinetics and Recreation (Co-operative)

- The Bachelor of Human Kinetics and Recreation (Co-operative) shall normally be completed on a full-time basis, and includes 120 credit hours, and three work terms as outlined in Table 1 Bachelor of Human Kinetics and Recreation (Co-operative).
A student is encouraged to consider the honours regulations outlined under Honours Degree.
Table 1 Bachelor of Human Kinetics and Recreation (Co-operative)

| Required Non-HKR Courses (33 Credit Hours) | Required HKR Courses (42 Credit Hours) | Complementary Study Courses <br> (45 Credit Hours) |
| :---: | :---: | :---: |
| 21 credit hours: <br> Biology 2040 <br> 3 credit hours in a Critical Reading and Writing (CRW) <br> designated course <br> English 1090 or 1000 <br> Psychology 1000, 1001 <br> Sociology 1000 <br> Statistics 2550 or equivalent <br> 12 credit hours (or an Optional Kinesiology or Physical <br> Education Pathway as outlined below): <br> Biology 2041 <br> 3 credit hours in Psychology <br> 3 credit hours in a Quantitative Reasoning (QR) designated course <br> 3 credit hours in Sociology at the 2000 level <br> Optional Kinesiology Pathway <br> (12 credit hours): <br> Chemistry 1050 or 1200 <br> Chemistry 1051 or 1001 <br> Mathematics 1000 <br> Physics 1020 <br> Optional Physical Education Pathway <br> (12 credit hours): <br> Biology 2041 <br> Mathematics 1000 or 6 credit hours from Mathematics 1050, 1051, 1052, 1053, 1090, 109A/B <br> 6 credit hours in non-HKR complementary study courses | HKR 2000 <br> HKR 2300 <br> HKR 2310 <br> HKR 2320 <br> HKR 2500 <br> HKR 3330 <br> HKR 3340 <br> HKR 3400 <br> HKR 3410 <br> HKR 3555 <br> HKR 3910 <br> HKR 3920 <br> HKR 4600 <br> 3 credit hours chosen from HKR 4410, 4420, 4575, 4685 <br> HKR 1123, 299W, 399W, 499W | 15 credit hours from non-HKR complementary study courses of which no more than 9 credit hours can be at the 1000 level. <br> 27 credit hours from HKR complementary study courses of which no more than 12 credit hours can be at the 2000 level and a minimum of 3 credit hours must be at the 4000 level. <br> 3 additional credit hours in either a non-HKR complementary study course at the 2000 level or above, or a HKR complementary study course at the 3000 level or above. <br> A student may choose to pursue an Optional Pathway as outlined below in Table 2 Bachelor of Human Kinetics and Recreation (Co-operative) Optional Pathways |

### 6.1.1 Optional Pathways

A student may select from one of the five optional pathways. A pathway provides students with the opportunity to focus their studies. Particular attention should be paid to the necessary prerequisites when scheduling courses. These pathways are not binding. Students are not required to pursue a pathway, and even if they do, it is not reflected on their transcripts or degree parchments. Students who do not pursue a pathway must ensure the 120-credit-hour minimum degree requirements are met in accordance with Table 1 Bachelor of Human Kinetics and Recreation (Co-operative) above.

Table 2 Bachelor of Human Kinetics and Recreation (Co-operative) Optional Pathways

| Community Recreation | Health Promotion | Kinesiology | Physical Education | Therapeutic Recreation |
| :---: | :---: | :---: | :---: | :---: |
| HKR 2100 | HKR 2505 | HKR 2340 | HKR 2210 | HKR 2515 |
| HKR 2505 | HKR 2515 | HKR 2600 | HKR 2220 | HKR 2585 |
| HKR 2515 | HKR 2585 | HKR 2703 | HKR 3110 | HKR 3485 |
| HKR 2545 | HKR 3535 | HKR 3300 | HKR 3300 | HKR 3515 |
| HKR 2585 | HKR 3575 | HKR 3310 | HKR 3320 | HKR 3685 |
| HKR 3100 | HKR 4485 | HKR 3320 | A minimum of 6 credit hours from | HKR 3785 |
| HKR 3535 | 3 credit hours from Sociology at the | HKR 4702 | HKR 3220, 4210, 4220. | HKR 4485 |
| HKR 4485 | 2000 level or above | HKR 4703 | A minimum of 24 credit hours in a | HKR 4785 <br> Psychology 3640 |

### 6.2 Bachelor of Kinesiology

- The Bachelor of Kinesiology may be completed on a full-time or part-time basis and requires 120 credit hours as outlined in Table 3 Bachelor of Kinesiology.
A student is encouraged to consider the honours regulations outlined under Honours Degree.
Table 3 Bachelor of Kinesiology

| Required Non-HKR Courses (30 Credit Hours) | Required HKR Courses (57 Credit Hours) | Complementary Study Courses (33 Credit Hours) |
| :---: | :---: | :---: |
| Biology 2040 | HKR 2000 | 33 credit hours of complementary study |
| Chemistry 1050, 1051, or 1200, 1001 | HKR 2300 | courses of which 27 credit hours must |
| 3 credit hours in a Critical Reading and | HKR 2310 | be at the 2000 level or above: |
| Writing (CRW) designated course | HKR 2320 | 12-15 credit hours in HKR complementary |
| English 1090 or 1000 | HKR 2340 | study courses other than those identified |
| Mathematics 1000 | HKR 2500 | as required HKR courses. |
| Physics 1020 or 1050 | HKR 2600 | 18-21 credit hours in non-HKR |
| Psychology 1000, 1001 | HKR 2703 | complementary study courses other than |
| Statistics 2550 or equivalent | HKR 3300 | those identified as required non-HKR |
|  | HKR 3310 | courses. |
|  | HKR 3320 | - |
|  | HKR 3340 |  |
|  | HKR 3400 |  |
|  | $\begin{aligned} & \text { HKR } 3410 \\ & \text { HKR } 4330 \end{aligned}$ |  |
|  | HKR 4410 |  |
|  | HKR 4600 |  |
|  | HKR 4702 |  |
|  | HKR 4703 |  |

### 6.3 Bachelor of Physical Education

- The Bachelor of Physical Education may be completed on a full-time or part-time basis and requires 120 credit hours as outlined in Table 4 Bachelor of Physical Education.
- This program is offered in the Teaching and General degrees.

A student is encouraged to consider the honours regulations outlined under Honours Degree.
Table 4 Bachelor of Physical Education

| Required Non-HKR Courses (27 Credit Hours) | Required HKR Courses (63 Credit Hours) | Complementary Study Courses ( 30 credit hours) |
| :---: | :---: | :---: |
| 3 credit hours in a Critical <br> Reading and Writing (CRW) <br> designated course <br> English 1090 or 1000 <br> Mathematics 1000 and 3 credit hours in a complementary study course, or 6 credit hours chosen from Mathematics 1050, 1051, 1052, 1053, 1090, 109A/B. <br> Psychology 1000, 1001 <br> 6 credit hours in a laboratory science (Biology, Chemistry or Physics is recommended) <br> Statistics 2550 or equivalent | HKR 2000 <br> HKR 2004 <br> HKR 2100 <br> HKR 2210 <br> HKR 2220 <br> HKR 2300 <br> HKR 2310 <br> HKR 2320 <br> HKR 2500 <br> HKR 3110 (Students following the Bachelor of Physical Education (General) degree must replace HKR 3110 with 6 credit hours in HKR complementary study courses at the 2000 level or above.) <br> HKR 3220 <br> HKR 3300 <br> HKR 3310 <br> HKR 3320 <br> HKR 3340 <br> HKR 3400 <br> HKR 4210 <br> HKR 4220 <br> HKR 4420 <br> HKR 4600 | 6 credit hours in HKR complementary study courses at the 2000 level or above. <br> A minimum of 24 credit hours in a Minor or an acceptable Academic Discipline. In choosing the minor students must follow the minor regulations of the appropriate Faculty or School. Students must select from and follow the Academic Discipline requirements of the Faculty of Education Bachelor of Education (Intermediate/Secondary), Admission Regulations. <br> No more than 6 credit hours at the 1000 level may be included in the 24 credit-hour Academic Discipline. <br> At least 3 credit hours at the 3000 level or higher must be included in the 24 credit-hour Academic Discipline. |
| Additional Requirement <br> At the time of graduation, students require proof of current certification in first aid and CPR. These certifications must be submitted to the School's Academic Program Officer. |  |  |

### 6.4 Bachelor of Recreation

- The Bachelor of Recreation may be completed on a full-time or part-time basis and requires 120 credit hours as outlined in Table 5 Bachelor of Recreation.
- An Optional Therapeutic Recreation Pathway is available in this program.
- An Optional Minor is available in this program. In completing the minor students must follow the minor program regulations listed under the appropriate Faculty or School.
A student is encouraged to consider the honours regulations outlined under Honours Degree.
Table 5 Bachelor of Recreation

| Required Non-HKR Courses (24 Credit Hours) | Required HKR Courses (54 Credit Hours) | Complementary Credit Hours (42 Credit Hours) |
| :---: | :---: | :---: |
| 3 credit hours in a Critical <br> Reading and Writing (CRW) <br> designated course <br> English 1090 or 1000 <br> Geography 1050 <br> Psychology 1000, 1001 <br> Sociology 1000 <br> 3 credit hours in Sociology at the 2000 level <br> Statistics 2550 or equivalent | HKR 2000 | 42 credit hours of complementary study courses of which 30 |
|  | HKR 2100 | credit hours must be at the 2000 level or above: |
|  | HKR 2300 | 15-18 credit hours in HKR complementary study courses at the |
|  | HKR 2500 | 2000 level or above |
|  | HKR 2505 | 24-27 non-HKR complementâry study courses. |
|  | HKR 2515 | Optional Minor |
|  | HKR 2545 | In completing the minor students must follow the minor program |
|  | HKR 2585 <br> HKR 3100 | regulations listed under the appropriate Faculty or School. |
|  | HKR 3340 | Optional Therapeutic Recreation Pathway |
|  | HKR 3400 | Students interested in pursuing a therapeutic recreation pathway |
|  | HKR 3515 | shall normally complete the following among the 42 |
|  | HKR 3535 | complementary study credit hours listed above: |
|  | HKR 3555 | HKR 2311, or 2310 and 2320 |
|  | HKR 3575 or 3785 | HKR 3485 or 3685 |
|  | HKR 4485 | Psychology 3640 |
|  | HKR 4575 or 4685 HKR 4600 |  |

### 6.5 Honours Degrees

1. An honours degree signifies superior academic achievement with specific course work in kinesiology, physical education, and recreation programs.
2. An application for admission to any of the honours degrees is not required. Rather, students indicate on the prescribed application for graduation form that they wish to be considered for an honours degree.
3. To receive an honours degree, a student shall:

- meet the requirements of the general degree;
- successfully complete HKR 4600, 4605 and 4610 with a minimum grade of $80 \%$ in each course;
- obtain an overall average of $80 \%$ or better on all HKR courses for the degree; and
- obtain an overall average of $70 \%$ on the non-HKR credit hours required for the degree.

4. A student for the honours degree who does not fulfill these conditions but fulfills the requirements for the general degree shall be awarded the general degree.
5. A student may, with the approval of the Committee on Undergraduate Studies, repeat or substitute up to three courses in order to meet the requirements of clause 3 above. In counting repeats, each attempt at the same course will count as one course towards the maximum. That is, the same course, repeated three times, would place a student at the maximum and no additional repeats or substitutions would be allowed.
6. Students are not permitted to repeat or substitute work terms for the purpose of meeting the academic requirements for honours degrees.
7. A student who, for academic reasons, has been required to withdraw from a program offered by the School will not be eligible for the honours degree.

## 7 Promotion Regulations

### 7.1 General Information



- In addition to meeting the promotion regulations for the School of Human Kinetics and Recreation all students must meet the general academic regulations (undergraduate). For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).
- Success in the programs depends on meeting the requirements of both academic terms and work terms.
- To be promoted a student must, in addition to obtaining the requisite grades and average, complete and deliver all work term reports as required.


### 7.2 Promotion Status

- A student's promotion status at the end of each term will be in one of the following four categories:


### 7.2.1 Clear Promotion

Clear Promotion means a student can proceed to the next term without restrictions.

- Students completing an academic term will receive a Clear Promotion by obtaining an overall average of at least $60 \%$, with a numeric grade of at least $60 \%$ in each HKR course, and a numeric grade of at least $50 \%$ in each non-HKR course.
- Students completing a work term will receive a Clear Promotion by obtaining a PAS (pass) or a PWD (pass with distinction) in the work term.
- Students completing courses in addition to a work term must obtain a PAS (pass) or a PWD (pass with distinction) in the work term and an overall average of at least $60 \%$, with a numeric grade of at least $60 \%$ in each HKR course, and at least $50 \%$ in each nonHKR course.


### 7.2.2 Probationary Promotion

Probationary Promotion designates less than a Clear Promotion but requires an overall average of at least $60 \%$, with a numeric grade of at least $50 \%$ in each course, and not more than one HKR course with a numeric grade below 60\%.

- A student with Probationary Promotion at the end of Academic Term 1 may be permitted to enter Academic Term 2 but must have Clear Promotion by the end of Academic Term 2.
- A student with Probationary Promotion from any academic term may continue to the subsequent work term under the condition that entry into the next academic term is not allowed until the student's status is changed to Clear Promotion.
- A student with Probationary Promotion at the end of the final academic term will not be recommended for graduation until the student's status is changed to Clear Promotion.
- To change Probationary Promotion to Clear Promotion the student must satisfy the School that the student is competent in the subject of the HKR course in which the student has failed to achieve $60 \%$. This will normally entail re-examination, after which the student will be declared to have passed or failed a test of competency in the subject concerned. Re-examination is normally available only to a student who has submitted all required coursework during the semester. No numerical grade will be assigned in the re-examination, and the original grade submitted for the course will not be changed.
- Re-examination may be written, oral, practical or a combination of formats and will be at a time determined by the School.
- Only one re-examination is permitted per course.
- A maximum of two re-examinations is permitted in a student's degree program. If a student is awarded a grade of less than $60 \%$ in a third HKR course, the student will be required to repeat or replace the course.
- It is the responsibility of the student to arrange for re-examination before the end of the first week of the student's next academic term. If re-examination is not arranged in accordance with this time frame, the student will be required to repeat or replace the course.
- The School may recommend that the student complete remedial studies before re-examination.


### 7.2.3 Probationary (A) Promotion

Probationary (A) Promotion designates failure to successfully complete the required components of HKR 2210, 2220, 3210, 3220, 3920, 4210 and 4220 in a given term.

- Probationary (A) Promotion will be given upon the recommendation of the course instructor/Co-ordinator and/or the Committee on Undergraduate Studies and only for extreme circumstances, duly authenticated.
- A student with Probationary (A) Promotion in any term will be permitted to enter subsequent terms and will receive a letter grade of INC (incomplete) in the course. A final numeric grade will not be received until the required components of each course have been successfully completed. Academic Council will grant this status, taking into account the specific factors involved in each case. This status is not automatic, as failure to successfully complete all required components of each course would normally result in a failing grade.
- To change Probationary (A) Promotion to Clear Promotion, a student must successfully complete the activity course(s), with a minimum grade of $60 \%$, within one academic year of the date on which the original grade(s) of Incomplete was (were) recorded.
- A student with Probationary (A) Promotion at the end of the final academic term will not be recommended for graduation until the student has successfully completed all required components of all courses, and the student's status is changed to Clear Promotion.


### 7.2.4 Promotion Denied

Promotion Denied indicates Clear Promotion is not achieved each term or following probation.

- A student with Promotion Denied status will be required to withdraw from the School. Students with Promotion Denied status may apply for readmission to the program after two semesters. A student will normally be readmitted into the term from which promotion was denied.
- A student who is denied promotion for failing a work term may be considered for readmission after the lapse of two semesters, at which time the student will be required to complete a further work term with satisfactory performance before being admitted to any further academic term in the School. A work term may be repeated only once, and not more than two work terms may be repeated in the entire program.
- A student who has been denied promotion as a result of having failed a work term and who, in the opinion of the School, can benefit from a remedial program, may be permitted an extension of time not to exceed the end of the registration period of the subsequent semester to complete the requirements of the work term.
- A student who is denied promotion as a result of grades received in HKR and non-HKR courses will be required to repeat all HKR courses in which they obtained a numeric grade of less than $60 \%$ in that term. A non-HKR course may be replaced by a course acceptable in the student's program.
- A student with Promotion Denied status at the end of the final academic term will not be recommended for graduation until the student's status is changed to Clear Promotion.


### 7.3 Other Information

- The Committee on Undergraduate Studies will determine each student's promotion status at the end of each term and will make its recommendations to Academic Council.
- Academic Council may promote a student notwithstanding the promotion regulations given above. A decision of this nature will be made only for reasons acceptable to Academic Council and in the case of a student thought likely to succeed in future terms.
- A student shall be permitted only one readmission to the School.
- Students may be required to withdraw from their program at any time, if, in the opinion of the School, they are unlikely to benefit from continued attendance.


## 8 Graduation

Upon meeting the qualifications for any of the programs of the School of Human Kinetics and Recreation a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 9 Waiver of School Regulations

Every student has the right to request waiver of School regulations. Students wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

### 9.1 General Information

- The School reserves the right in special circumstances to modify, alter, or waive any School regulation in its application to individual students where merit and equity so warrant in the judgment of the Committee on Undergraduate Studies of the School.
- All requests, other than requests for waiver of a prerequisite or co-requisite of a School course, must be submitted to the Committee on Undergraduate Studies of the School for consideration. Waiver of a School course prerequisite or co-requisite may be granted by the course instructor.
- Students requesting a waiver of a School regulation, other than requests for waiver of a prerequisite or co-requisite of a School course, must submit their request in writing to the Chair of the Committee on Undergraduate Studies on the prescribed form which is available from the School's general office. Medical and/or other documentation to substantiate the request must be provided.
- Any waiver granted does not reduce the total number of credit hours required for the degree.
- In addition, regardless of any waiver granted, students enrolled in a co-operative program must successfully complete a minimum of two work terms.


## 10 Appeal of Decisions

Any student whose request for waiver of School regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 11 HKR Courses Available to Students Not Enrolled in a Program Offered By the School

### 11.1 Regulations for Students Not in a Program Offered By the School

- Students not in a program offered by the School may register for a maximum of 15 credit hours only from the following list if space is available.
- Students who have been required to withdraw from a program offered by the School may not register for any HKR course.
- Students not in a School program will be required to drop any HKR course(s) in excess of 15 credit hours and may be subject to academic and financial penalties.


### 11.2 HKR Courses

1000 Fitness and Wellness
1001 Resistance Training for Health and Activity
2000 Introduction to Kinesiology, Physical Education and Recreation
2002 Coaching
2300 Growth and Development
2310 Human Anatomy
2311 Introduction to Anatomy and Physiology
2320 Primary Human Physiology
2515 Social Psychology of Leisure
2585 Foundations of Therapeutic Recreation
2600 Introduction to Human Nutrition
2601 Physical Activity, Obesity, and Weight Control
3360 Care and Prevention of Athletic Injuries
3400 Social Determinants of Health and Physical Activity
3410 Sociology of Physical Activity and Sport
3490 Gender in Sport and Physical Activity
3535 Legal Aspects of Leisure and Recreation Services
3595 Gender and Leisure
4330 Social Psychology of Sport, Physical Activity and Recreation

## 12 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the School.
All courses of the School are designated by HKR.
1000 Fitness and Wellness is an introduction to the concepts of fitness and wellness, and the relationships among physical activity, fitness, wellness, quality of life, and longevity.
UL: not applicable towards any of the degrees offered by the School
1001 Resistance Training for Health and Activity is an introduction to resistance training exercises, programs, and principles.
CR: HKR 2340, the former HKR 4320
UL: not applicable towards the human kinetics and recreation (cooperative), kinesiology or physical education degrees offered by the School

1123 Professional Development Seminars are offered during the Fall semester prior to a student's first work term. These seminars introduce the co-operative education process and prepare the student for work terms. These seminars are graded PAS or FAL based on attendance and participation.
AR: attendance is required
CH: 0
LC: as scheduled
2000 Introduction to Kinesiology, Physical Education and Recreation introduces the philosophical, scientific, socio-cultural, historical concepts, and influences in kinesiology, physical education, and recreation.
2001 Introduction to Physical Education for Education Students provides students a general overview of the role that physical education and active living play in the overall development of primary and elementary students, and in the creation of positive learning environment in schools. This course is intended for students in the primary/elementary program offered by the Faculty of Education.
CR: HKR 3110
PR: admission to the Bachelor of Education (Primary/Elementary) offered by the Faculty of Education
UL: not applicable towards any of the degrees offered by the School
2002 Coaching introduces the various methods, principles, and theories
used to coach developing athletes in various sport settings. Factors such as the coach's role, planning, analysing and developing skills, sport safety, and physical preparation will be presented with an emphasis on attaining competency in these areas.
2004 Enhancing Performance in Physical Activity gives an overview of the various models, principles, and theories used to explain and predict ways in which athletes and exercisers conduct themselves in various sport settings. Selected intervention techniques to enhance performance will be presented.
2005 Personal Stress Management is designed to provide students with an introduction to stress and to explore the relationship between exercise, fitness and physical activity and stress management. It describes how to reorganize one's life by presenting a systematic analysis of stress and coping mechanisms appropriate to different stages of life. The stress coping mechanisms will be presented with an emphasis on application. Completion of this course does not qualify students as stress management counsellors. Students interested in this field are advised to contact the Department of Psychology for information on careers in counselling.
CO: Psychology 1000 and 1001
PR: Psychology 1000 and 1001
2100 Introduction to Organization and Administration introduces the basic administrative functions in a work setting in physical education and/or recreation. The laboratory sessions will assist students to develop skill in the basic computer applications relevant to these functions.
LH: 2
2210 Physical Activities Course: Physical and Health Literacy employs the conceptual approach of movement education (i.e. concepts, skills, and strategies) through a wide variety of physical activities that focus on the development of the whole person. Socially-responsible leadership and inclusive education will also be emphasized.
AR: attendance is required. Students who are absent more than six class hours may be required to withdraw from the course and will receive a letter grade of DRF and a numeric grade of 0 .
LC: as scheduled
LH: as scheduled
2220 Physical Activities Course: Active Living may employ a number of teaching methods in promoting lifelong active living to understand knowledge, skills, attitudes, and behaviours that promote active participation, physical fitness, and safety in various physical activity contexts (e.g., gymnastics and play) and environments (e.g., in water and on land). Emphasis will be placed on the language and practice of the conceptual approach. Concepts, skills, and strategies will be emphasized.
AR: attendance is required

[^16]LC: as scheduled
LH: as scheduled
OR: Red Cross Swim level 8 or equivalent
PR: HKR 2210
2300 Growth and Development is an introductory study of human growth and developmental factors and their influence on the learning of motor skills.
2310 Human Anatomy is a study of the structure of the human body with emphasis on selected systems (endocrine, neural, muscular, skeletal, cardiovascular, respiratory).
CR: HKR 2311
LH: 2
2311 Introduction to Anatomy and Physiology is designed to provide students with general overview of the anatomy and physiology of the human body. Students will explore skeletal, muscular, neural and cardiorespiratory systems in addition to a very brief introduction to cell structure and 'cellular' muscle function.
CR: HKR 2310, HKR 2320
UL: not applicable towards the human kinetics and recreation (cooperative), kinesiology or physical education degrees offered by the School
2320 Primary Human Physiology is a study of bodily functions with emphasis of selected systems (endocrine, neural, muscular, cardiovascular, respiratory).
CR: HKR 2311
LH: 2
2340 Fitness Leadership (formerly HKR 4320) prepares professionals in the administrative, interpretive, instructional, interpersonal, and pedagogic competencies required for and associated with fitness testing, prescription, teaching, and leadership.
CR: HKR 1001, the former HKR 4320
2410 Historical and Comparative Physical Education - inactive course.
2420 Doping in Sport - inactive course.
2500 Diversity \& Inclusion provides students with a broad multi-disciplinary perspective on diversity and inclusion for a global society through discussion of theory, research, and practice. We will explore how elements of the social structure construct categories of race, class, gender, sexuality, ability, size, religion, and age have been transformed into systems of oppression and privilege.

2505 Recreation Programming and Evaluation introduces the student to a variety of methodologies, skills, and materials for planning, developing, implementing, and evaluating professional recreation programs for diverse populations in a variety of settings.
2515 Social Psychology of Leisure introduces the personality and social factors that shape how people experience leisure. Course materials will focus on life cycle theory, intrinsic and extrinsic motivation, perceived freedom, constraints theory, and other social psychological theory related to leisure.
2545 Introduction to Outdoor Recreation and Education gives an overview of the foundational principles of outdoor education and recreation as they pertain to philosophy, wilderness ethics, professional preparation, movement through wildlands, environmental hazards, navigation, and safety. Students will participate in a sampling of outdoor education and recreation activities during the course including a three-day field trip.
AR: attendance is required. Students who are absent more than six hours
may be required to withdraw from the course and will receive a letter
grade of DRF and a numeric grade of 0 .
LC: as scheduled
PR: HKR 2505
2585 Foundations of Therapeutic Recreation is designed to examine a variety of aspects of therapeutic recreation from both a practical and theoretical perspective. Topics will include the history, philosophies, and theories underlying therapeutic recreation, therapeutic recreation models, essential skills for the therapeutic recreationist and ethical considerations for therapeutic recreation. Diverse groups (e.g. adults, youth, disadvantaged and disabled) and settings (e.g. community, schools, institutions, and workplace) suitable for therapeutic recreation will be discussed.
2600 Introduction to Human Nutrition (same as Biochemistry 2600) gives an overview of human nutrition with an emphasis on topics of current interest. Students will gain an understanding of nutrition in the context of health maintenance across the life span. Topics covered will include nutrition during pregnancy, nutrition for infants, Canadian Recommended Nutrient Intake/Dietary Reference Intake, weight loss and weight gain, nutriceuticals, and ergogenic aids.
CR: Biochemistry 2600
2601 Physical Activity, Obesity, and Weight Control explores the relationship between physical activity, obesity, and morbidity. Emphasis will be placed on the incidence and prevalence of obesity, environmental and
genetic factors affecting obesity, and mechanisms of weight and body composition modification.

2703 Introduction to Human Factors is an introduction to the field of human factors, the field that studies aspects of human movement, health, safety, and performance in the workplace. This will include an introduction to the methods of detection, evaluation, and the physiological changes arising from hazards (e.g. inappropriate levels of noise, vibration, and illumination) in the workplace. The course will also examine overuse injuries in workplace studied in the context of basic biomechanics and function of the musculoskeletal system.
CO: HKR 2320 and Physics 1020
PR: HKR 2310, Chemistry 1010 and the former 1011 or Chemistry 1050 and 1051
299W Work Term 1 offers an opportunity for students to learn, develop, and practice high standards of professional behaviour and performance in the work environment. A student is required to submit a personal job diary and a work term report which should, at a minimum, reflect a clear understanding of job events and work place expectations and show reasonable competence in written communication skills.
CH: 0
LC: 0
PR: HKR 1123
3002 Advanced Coaching is an advanced study of the various methods, principles, and theories used to coach athletes in various sport settings. Topics such as planning, the coach's role, analysing, and developing skills, mental training, physical preparation, and development of a personal coaching plan will be studied with an emphasis on attaining competency in these areas. Practical coaching experience is a required component of the course.
LH: 3 Students will participate in practical coaching situations from which
coaching journals will be developed for course evaluation.
PR: HKR 2002
3100 Advanced Organization and Administration introduces advanced organizational and administrative competencies and functions within the professional fields of recreation and physical education. Students will learn about facility operations and management and the financial management of public, non-profit, and private organizations. Students will study the planning and overseeing of facilities, facility maintenance operations, facility rentals and partnerships, understanding and interpreting basic accounting documents, pricing programs and services, grants and proposal writing.
PR: HKR2100
3110 Curriculum Development and Teaching Methods gives an overview, through a blend of theory and practical experience, of curriculum development and teaching methods as they apply to primary/elementary level physical education.
$\mathrm{CH}: 6$
CO: HKR 3300
CR: HKR 2001
LH:9
PR: HKR 2000, 2210, 2300, 2310, 2320 and 3340
3210 Physical Activities Course: Group Exercise, Net/Wall and Health Related Fitness covers activities such as volleyball, tennis, badminton, plus a selection of other net \& wall games. A number of teaching methods may be employed and emphasis will be placed on the language and practice of the conceptual approach. Concepts, skills, and strategies will be emphasized.
AR: attendance is required. Students who are absent more than six class
hours may be required to withdraw from the course and will receive a
letter grade of DRF and a numeric grade of 0 .
LC: as scheduled
LH: as scheduled
PR: HKR 2210
3220 Physical Activities Course: Summer Activities and Teaching Leadership through Physical Activity may include canoeing, orienteering, lightweight camping, and an over-night canoe trip. A number of teaching methods may be employed. Concepts, skills, and strategies will be emphasized.
AR : attendance is required
LC: as scheduled
LH: as scheduled
PR: HKR 2210, HKR 2220, HKR 3340
3221 Wilderness First Aid for Outdoor Leaders provides a minimum standard for outdoor professionals, guides and instructors who work in a wilderness setting. Course content extends beyond urban-based first aid programs to include elements inherent in leading groups in the outdoors and guiding wilderness adventures. Special emphasis is placed on prevention of injuries, accident scene management, leadership, leader responsibility and liability, advanced first aid kits, wound management and managing the trauma victim. CPR is included in this course.
3300 Motor Learning gives an overview of motor learning and performance variables and their application to the teaching of physical skills, and will
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
investigate motor control issues related to skill instruction. PR: HKR 2300

3310 Physiology of Exercise covers the physiological responses of the metabolic, neuromuscular, and cardiorespiratory systems at rest and during acute and chronic activity.
LH: 3
PR: HKR 2310 and 2320; or Biochemistry 311A and 311B; or Nursing 1002 and 1012; or the former Pharmacy 3201 and 3202

3320 Introduction to Biomechanics is the analysis of human movement; the mechanics of motion and the general application of kinesiology.
CO: HKR 2320
LH: 2
PR: HKR 2310 It is strongly recommended that students successfully complete Physics 1020 prior to enrolling in this course
3330 Health Issues I introduces students to the profession of health promotion. Students will explore the historical, social, political, and cultural contexts of health promotion, while gaining a better understanding of the models and theoretical frameworks that help to inform health promotion and the process of developing, implementing and evaluating health promotion programs.

3340 Adapted Physical Activity presents an overview of current practices, philosophies, and issues related to physical activity and recreation for persons with disabilities. Knowledge and understanding of various disabling conditions and consequent needs of persons with disabilities, including health, safety and fitness, and how these needs may be met in terms of physical activity will be emphasized.

## 3350 Health Issues II - inactive course.

3360 Care and Prevention of Athletic Injuries is a basic introduction to the field of athletic therapy and sports medicine. The content focuses on the prevention and care of sports injuries and covers topics such as preventive screening, safe environments, on the spot assessment and First Aid, legal responsibility, and supportive taping/wrapping.
PR: HKR 2310 and a Basic First Aid Course
3400 Social Determinants of Health and Physical Activity provides students with a social, political, economic, environmental, and cultural perspective on health and health inequalities. A concentrated look at contemporary health issues using the social determinants of health model will equip students with critical skills necessary to consider health issues beyond physical pathologies.

3410 Sociology of Physical Activity \& Sport (same as Sociology 3410) is an analysis of functions of physical activity and sport in Canadian and North American society. Physical activity and sport will be viewed through social organization, social processes, social problems, socialization and stratification, and violence.
CR: Sociology 3410
3485 Therapeutic Recreation Service Delivery focuses on issues related to the delivery of therapeutic recreation services. In particular, the following topics will be addressed: documentation in therapeutic recreation; client assessment issues; therapeutic recreation program planning (identifying client needs, selecting appropriate interventions, task and activity analysis, planning change-oriented programs, writing behavioural objectives, etc.); program and client evaluation; written plans of operation.
PR: HKR 2585 and HKR 2505
3490 Gender in Sport and Physical Activity - inactive course.
3505 Adventure Programming - inactive course.
3515 Inclusive and Therapeutic Recreation in Outdoor Settings provides an introduction to current philosophy, issues, and practices relating to inclusive and therapeutic recreation in outdoor settings. This course is designed to provide students with the knowledge and skills necessary to practice inclusive and therapeutic recreation in outdoor settings.
3525 Canadian Recreation Delivery Systems - inactive course.
3535 Legal Aspects of Leisure and Recreation Services provides students with an opportunity for in-depth study of legal issues related to the operation of leisure services and facilities. Issues of tort and contract liability, employment related legal aspects, human rights and freedoms, and administrative procedures involved in property acquisition, law enforcement, and risk management are the topics of this course.
3545 Outdoor Recreation Leadership acquaints students with the breadth, depth, and scope of outdoor recreation leadership including a detailed examination of theories, principles, and practices. The course provides opportunities for individual students to develop, practice, and receive feedback on their outdoor leadership skills. The course includes a required field experience in outdoor recreation leadership.
PR: HKR 2505 or HKR 3220
3555 Outdoor Recreation and Society gives an overview of outdoor
recreation principles, theories, and practices and their influence on health and society. This course examines the recreational use of natural settings, management of outdoor resources, the value of protected areas, and the health benefits of outdoor activity.

3565 Tourism/Commercial Recreation examines behavioural factors influencing tourism; promotion of commercial recreation attractions, provincial strategies in travel and tourism, problems of leisure travel, stability of entrepreneurial ventures in tourism, and research and planning strategies relevant to commercial ventures.

3575 Community Development and Recreation introduces various theoretical perspectives on community organization and development, as well as methods available to the recreation practitioner to facilitate the development of recreation services in communities. This course examines, in particular, recreation services delivery which involves community residents and groups in recreation program decision-making and implementation.

## CR: HKR 3785

3595 Gender and Leisure provides students with an opportunity to examine, understand and appreciate critically the influences of gender on leisure. The student will be expected to analyse, synthesize, and evaluate a wide range of historical, cultural, philosophical, and socio-psychological issues that have shaped the nature and scope of participation in leisure.
3685 Assessment and Documentation in Therapeutic Recreation examines the assessment and documentation components of the therapeutic recreation process. Students will focus on both the oral and written communication skills necessary to carry out these tasks successfully. Active listening, documentation with correct terminology, and data interpretation for treatment services will be developed through lecture and fieldwork.
PR: HKR 2585
3785 Community Development and Recreation in Therapeutic Recreation Settings introduces various theoretical perspectives on community organization and development, as well as methods available to the therapeutic recreation practitioner to facilitate the development of recreation services in communities. Various issues such as poverty, ethnicity, and disability will be addressed. This course employs an ecological perspective in examining therapeutic recreation service delivery which involves community residents and groups in recreation program decisionmaking and implementation. The interconnectedness between leisure education, recreation and health and community development is discussed.

## CR: HKR 3575

3910 Exercise Psychology will provide a broad understanding of Exercise Psychology. Emphasis will be placed on understanding patterns of physical activity participation, motives and barriers influencing exercise and physical activity, theories and models of exercise behavior, intervention strategies aimed at modifying exercise behaviour, psychosocial influences and consequences of exercise, as well as the impact of exercise on different mental health states (e.g., depression, anxiety, emotional well-being).
3920 Physical Activities Course: Health Promotion provides students a general overview of the role that physical activity plays in one's health and wellness. Students will gain experiential learning opportunities in applying health promotion knowledge, skills, attitudes, and behaviours within various types and contexts of physical activity.
AR: attendance is required
UL: not applicable towards any of the physical education degrees offered by the School

399W Work Term 2 offers an opportunity for students to further expand and develop professional knowledge and skills, while demonstrating the ability to accept increased responsibility and challenge in the work place. A student is expected to demonstrate competence in written communication skills through the maintenance of a personal job diary and the submission of a formal report demonstrating the student's ability to effectively gather, analyse, organize, and present information regarding a specific aspect of the work term position.
CH: 0
LC: 0
PR: HKR 1123 and successful completion of 299W
4210 Physical Activities Course: Winter Activities includes outdoor activities such as winter travel methods emphasizing cross-country skiing, snowshoeing, navigational skills, winter survival/camping, and overnight winter camping. A number of teaching methods may be employed and emphasis will be placed on the language and practice of the conceptual approach. Concepts, skills, and strategies will be emphasized.
AR: attendance is required. Students who are absent more than six class
hours may be required to withdraw from the course and will receive a
letter grade of DRF and a numeric grade of 0 .
LC: as scheduled
PR: HKR 2210, HKR 3220
4220 Physical Activities Course: Games and Activities includes activities such as target, net/wall, striking/fielding, territorial games and activities,

[^17]Indigenous games and activities, as well as those from multicultural perspectives. A number of teaching methods may be employed and emphasis will be placed on the language and practice of the conceptual approach. Concepts, skills, and strategies will be emphasized.
AR: attendance is required
LC: as scheduled
LH: as scheduled
PR: HKR 2210, HKR 2220, HKR 3340

## 4300 Human Motor and Perceptual Motor Disorders - inactive course.

4310 Evaluation - inactive course.
4330 Social Psychology of Sport, Physical Activity and Recreation introduces the psychological factors that influence participation in sport, exercise, physical activity and recreation and the psychological effects derived from participation.
4410 Issues in Kinesiology provides an overview of issues related to kinesiology by exploring, through research and discussion, trends and issues basic to the profession. It is meant to provide an environment for students to integrate and consolidate the knowledge they have gained to date and as such give them a better sense of Kinesiology as a profession. CR: HKR 4420, HKR 4575, HKR 4685
PR: successful completion of a minimum of 78 credit hours
4420 Issues in Physical Education explores, through research and discussion, trends and issues basic to the profession including areas in physical education, health, fitness, and lifestyle industries.
CR: HKR 4410, HKR 4575, HKR 4685
PR: successful completion of a minimum of 78 credit hours
4485 Leisure Education in Therapeutic Recreation Settings is designed to provide students with the knowledge and skills required to facilitate leisure education interventions designed to bring about desired changes in the leisure behaviour of individuals. The course will address the following three broad areas: a) concepts and models of leisure education; b) content related to specific skills required for leisure involvement (leisure awareness, social skills development, friendship development, stress management, assertiveness, decision making, etc.) and c) instructional and interactional techniques used in leisure education.
PR: HKR 2505
4515 Principles and Practices of Social Recreation - inactive course
4525 Planning for Recreation - inactive course.
4535 Camp Administration and Programming - inactive course.
4545 Facility Planning, Design and Management - inactive course.
4555 Leadership and Supervision in Recreation focuses on need, selection, training, and supervision of leaders in recreation. Certification, standards and professional organizations. Evaluation of leadership materials and methods used. Practical exposure to roles of both leader and supervisor through seminar and related fieldwork.

## 4565 Recreation Promotion and Marketing - inactive course.

4575 Recreation Ethics, Issues and Trends explores contemporary trends and issues identified by governments and recreation practitioners and the way in which these issues influence the delivery of leisure services.
CR: HKR 4410, HKR 4420, HKR 4685
PR: successful completion of a minimum of 78 credit hours
4585 Financing Recreation Services provides opportunities for in-depth study of financing leisure services in a variety of settings. The primary learning objectives are to achieve an understanding of revenue sources, financial management, and budgeting, the concepts of equity from a justice, social, and economic perspective, and the ability to use various techniques in the allocation of resources, the pricing of services, and ascertaining the costs of providing services.
4600 Introduction to Research introduces research methodologies currently employed in kinesiology, physical education or recreation.
PR: Statistics 2550 or equivalent
4605 Research Proposal provides students an opportunity to develop a research proposal suitable for the study or investigation of a topic relevant to kinesiology, physical education or recreation. Students who proceed to HKR 4610 will implement the study they have proposed.
PR: one of Statistics 2500 or Statistics 2550, a minimum of $80 \%$ in HKR 4600 and permission of the instructor

4610 Research Project is the second of a two-part study for honours students, directed by a faculty member of the School and will focus on a selected topic in the field of kinesiology, physical education or recreation.
PR: a minimum of $80 \%$ in HKR 4600 and HKR 4605, and one of Statistics
2500 or Statistics 2550

4625 Theoretical Perspectives of Recreation and Leisure - inactive course.

4635 Multicultural Perspectives of Recreation and Leisure - inactive course.

4685 Professional Issues in Therapeutic Recreation is designed to facilitate an in-depth exploration and analysis of philosophical issues and interdisciplinary theories and to discuss how they relate to therapeutic recreation practice and research. The course will be conducted as a seminar and students will be responsible for reading course materials and leading discussions on various topics. The ultimate goal of the course is to prepare the student to enter the profession confident in the ability to provide exemplary TR services.
CR: HKR 4410, HKR 4420, HKR 4575
PR: HKR 2505 and HKR 2585, successful completion of a minimum of 78 credit hours
4700 Advanced Fitness Training and Assessment prepares students to assess, prescribe, demonstrate, supervise, educate, and counsel apparently healthy individuals across the lifespan on information related to physical activity/exercise, fitness and health. The successful completion of this course will allow students to apply for a certification as a Professional Fitness and Lifestyle Consultant from the Canadian Society of Exercise Physiology.
LH: 2
PR: HKR 2340
4701 Environmental Physiology (formerly KIN 4701) examines human behavioural, autonomic and metabolic responses to extreme environments. This will include the study of human responses seen during changes from normal ambient temperature and pressure, to those experienced in the environments encountered during undersea diving, space travel, altitude, and other similar environments.
CR: the former KIN 4701
PR: HKR 2320
4702 Advanced Exercise Physiology prepares students to acquire the knowledge necessary to understand, analyse, and integrate information and experiences related to physiological adaptations occurring with acute and chronic activity and disuse.
LH: 2
PR: HKR 3310
4703 Occupational Ergonomics and Sport Biomechanics focuses on the contrast between biomechanical analyses of workplace tasks and athletic movement. Students will conduct a detailed biomechanical analysis of a given movement, in the workplace or for a given sport, with regard to both the probability of injury and optimization of performance.
LH: 2
PR: HKR 2703, 3320, and Physics 1020, or completion of Academic Term

## 5 of the Bachelor of Engineering program

4720 Directed Study requires approval of Dean of the School and the course instructor. Permission to register must be obtained in the term preceding enrolment.
4785 Internship in Therapeutic Recreation provides the student with an opportunity to develop the skills to become a competent practitioner utilizing the therapeutic recreation process, assessment, treatment planning, implementation/facilitation and evaluation. This practical experience will be carried out under the supervision of an approved Therapeutic Recreation professional. The internship will consist of 14-16 full-time consecutive weeks (35-40 hours per week for a minimum total of 560 hours). This course will normally be taken in the students' last co-op work term placement or last semester of their degree program. This course will normally be taken in conjunction with the students' last co-operative work term placement.

4910 Directed Study requires approval of Dean of the School and the course instructor. Permission to register must be obtained in the term preceding enrolment.
4915 Directed Study requires approval of Dean of the School and the course instructor. Permission to register must be obtained in the term preceding enrolment.

499W Work Term 3 offers an opportunity for students, who have sufficient academic grounding and work experience, to exercise greater independence and responsibility in their assigned work. A student must demonstrate a high level of competency in communications skills through the submission of a formal report on a topic related to the work term or through a formal presentation on an aspect of the work term using the latest in computer technology and applications.
CH: 0
LC: 0
PR: HKR 1123 and successful completion of 399W
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

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FACULTY OF HUMANITIES AND SOCIAL SCIENCES

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www.mun.ca/hss
Dean
Simpson, J., B.A. California Lutheran University, M.A. Lutheran School of Theology at Chicago, Ph.D. Northwestern University; Professor

Up-to-date personnel listings are available at www.mun.ca/hss/about/contact and www.mun.ca/hss/about/departments.php.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Faculty Description

The Faculty of Humanities and Social Sciences offers a wide range of undergraduate and graduate programs in the social sciences and the humanities, offering excellence in both teaching and research. These degree programs examine culture, thought, prehistory and history, human interactions and the social and natural forces that constantly transform our society. A Humanities and Social Sciences education can provide incomparable advantages. Students gain the critical-thinking, analytical and communication skills needed to succeed and adapt in a changing world. This can lead to exciting, productive careers. One of Memorial University of Newfoundland's largest and most diverse units, the Faculty of Humanities and Social Sciences is a place where you can study what fascinates you, and pursue a program that suits your aspirations for learning and career. At the graduate level, students find unique programs and the freedom to develop their knowledge and expertise. Our faculty conduct research in a wide variety of areas, making discoveries that foster our understanding of the past, present and future. Our alumni work in a wide variety of fields not only in Newfoundland and Labrador, but also in Canada and the rest of the world. Their services are in demand because they have learned to define and analyze problems, to think creatively, and to communicate to others. Members of the faculty are also actively engaged in the community, whether helping to understand complex problems, working with groups to preserve culture, hosting public lectures and readings, or helping raise awareness of significant issues relevant to the well-being of people and communities.
Additional information regarding the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

## 4 Admission, Registration and Withdrawal (Undergraduate Programs)

### 4.1 Admission

The application for admission or readmission is submitted online; current and returning Faculty of Humanities and Social Sciences applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/ apply.
These regulations shall also apply to interdisciplinary programs. In such cases, the student should contact the Program Coordinator or supervisor.

1. Declaration of the Bachelor of Arts or the International Bachelor of Arts degree programs may be made at the time of application to the University or by means of the DECLARATION/CHANGE OF ACADEMIC PROGRAM form following admission to the University. This form maybe be obtained at www.mun.ca/regoff/registration/Declare_Change_Academic_Program.pdf or in-person at the Office of the Registrar.
2. A student who intends to complete a degree in the Faculty of Humanities and Social Sciences must also declare a Major and Minor (or second Major) chosen according to the Major Program and the Minor Program below. In most cases, this declaration may be made at the time of application to the University or, following admission to the University, by means of the DECLARATION/ CHANGE OF ACADEMIC PROGRAM form, which must be submitted to the Office of the Registrar.
3. A student is encouraged to declare a Major and Minor (or second Major) no later than the semester in which they next attend the University following completion of 18 credit hours in courses applicable to their program(s).
4. A student is strongly advised to consult with departments or program coordinators or supervisors before making a declaration to the department or program of the student's intended Major or Minor.
5. In the case of programs with admission requirements which go beyond the general admission requirements of the University, a student should make formal application to the department, coordinator or supervisor after completion of the program's admission requirements. These Bachelor of Arts programs include, but are not restricted to the following: Major in Archaeology (Co-operative), Major in Economics (Co-operative), Major in Political Science (Co-operative). In the Faculty of Science, this includes the Major in Psychology (Co-operative).
6. For information about admission to a diploma program, refer to Diploma Programs, Admission.
7. For information about admission to a certificate program, refer to Certificate Programs, Admission.

### 4.2 Registration and Withdrawal

Information about University registration can be found at UNIVERSITY REGULATIONS - Registration. Additional regulations in the Faculty of Humanities and Social Sciences for degree programs such as the B.A. and iBA include the following:

1. As outlined in UNIVERSITY REGULATIONS - Registration, Course Weight/Course Load, a student in this Faculty may request
permission to enroll in more than the normal course load in a semester or session. Requests are reviewed by an academic advisor in the Office of the Dean.
a. A request to enroll in additional field school courses or equivalent in a semester shall require written permission of the academic unit Head. Such a request involving Intersession or Summer session shall require approval by an associate dean.
b. A request to enroll in one additional regular course in a Fall, Winter or Spring semester shall be approved by an associate dean only when a student has completed five courses in each of a minimum of two of the previous three semesters and obtained a minimum overall numeric grade average of $70 \%$ in those courses.
c. A request to enroll in two additional regular courses in a Fall, Winter or Spring semester or one additional course in Intersession or Summer session shall only be considered in extraordinary circumstances. Such a request requires approval by the Dean.
2. As outlined in UNIVERSITY REGULATIONS - Registration, Withdrawing from the University Without Academic Prejudice, from the beginning of the eighth week following the first day of lectures in any semester to the last day to add courses in the following semester as stated in the University Diary, a student who is prevented from completing the semester by illness, bereavement, or other acceptable cause, duly authenticated in writing, may request to withdraw from the University without academic prejudice.
a. Requests are reviewed by an academic advisor in the Office of the Dean and require approval by an associate dean. A student who is prevented from completing the semester by illness may be required to provide an appropriately completed Student Medical Certificate.

## 5 Academic Regulations

### 5.1 Course Syllabus

All course syllabi must observe UNIVERSITY REGULATIONS - Evaluation of Student Work, Course Syllabus. A course syllabus in the Faculty of Humanities and Social Sciences that is distributed in the first week of classes must also include:

1. the academic semester and year;
2. the course number, title, and description consistent with the course's entry in the University Calendar, including any prerequisites or co-requisites;
3. the instructor's name and at least one of a Memorial University of Newfoundland email address or Memorial University of Newfoundland online learning portal contact information (e.g., D2L);
4. for courses delivered on campus, the instructor's room number and phone number, if they have been assigned;
5. the instructor's office hours for students, if the course is delivered on campus;
6. a brief description of all required assignments and testing that comprise the method of evaluation;
7. information about assigned readings that are common to all students and, if applicable, additional required readings;
8. a provisional schedule that outlines the themes or topics to be covered throughout the semester, accompanied by an associated timeline of required reading;
9. an associated timeline of probable dates of required reading responsibilities for all students and the probable dates of all evaluation components; and,
10. information about missed testing, alternate and similar evaluation, and late penalties, all of which must be in accordance with UNIVERSITY REGULATIONS - Evaluation of Student Work, Exemptions from Parts of the Evaluation. A course syllabus does not include attendance regulations unless approved by Senate and the course's Calendar entry includes the statement "attendance required".
In addition, the syllabus for any course designated as Critical Reading and Writing (CRW), International Studies (IS), Language Study (LS) or Quantitative Reasoning (QR) must follow the applicable course guidelines available on the Faculty of Humanities and Social Sciences website at www.mun.ca/hss. Further information is available in the www.mun.ca/hss/faculty_staff/tasks.php.

### 5.2 Special/Selected Topics Courses

1. A special/selected topics course must observe UNIVERSITY REGULATIONS - Evaluation of Student Work, Special/Selected Topics Courses.
2. Special/selected topics courses are offered infrequently and only in unusual circumstances.
3. A special/selected topics course is ineligible to appear in the Calendar entry of an interdisciplinary Major or Minor program, a diploma program or a certificate program unless the course originates in that program, and is not eligible for the CRW, IS, LS or QR designations. A student or course instructor may, in consultation with the academic Head or program coordinator, submit a written request to the Faculty's Undergraduate Waivers and Appeals Committee for a course substitution waiver which, if granted, will normally be conditional on the course being regularized.

### 5.3 Grading

1. In all courses, evaluation of student work must observe UNIVERSITY REGULATIONS such as regulations concerning attendance, the method of evaluation, correction and return of student work, final examinations, grading, and academic misconduct.
2. In consultation with the course instructor and academic unit Head, the Dean of Humanities and Social Sciences vets and/or approves the final grade in a course. Emphasis is placed on ensuring that final grades are consistent with UNIVERSITY REGULATIONS - Grading.
3. A student who wishes to question a grade in a course should follow the process outlined in UNIVERSITY REGULATIONS - Appeal of Decisions, Route for Questioning Grades.

## 6 Degree Regulations - General and Honours Degrees

In these regulations, all references to Heads of Departments and Program Supervisors are to be read as "Head of Department or delegate" and "Program Supervisor or delegate."

### 6.1 Bachelor of Arts General Degree Components

1. A student for the General Degree of Bachelor of Arts must complete a minimum of 120 credit hours in courses subject to the following regulations.
2. A Bachelor of Arts emphasizes the study of the Humanities and Social Sciences. The Bachelor of Arts General Degree consists of the following components:
a. Core Requirements courses, some of which may also be used to satisfy other components of the Degree;
b. a Major Program, including a minimum $60 \%$ average, or alternatively an Honours Program;
c. a Minor Program, including a minimum $60 \%$ average, or alternatively a second major including a minimum $60 \%$ average; and
d. Electives.

### 6.1.1 Academic Advising and Declaring a Bachelor of Arts

A student is encouraged to consult with an academic advisor to discuss academic programs, including the Core Requirements. A student is encouraged to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences and a list of advisors are available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 6.1.2 Core Requirements

The Bachelor of Arts Core Requirements comprise a Breadth of Knowledge, Requirement, a Critical Reading and Writing (CRW) Requirement, a Language Study (LS) Requirement, and a Quantitative Reasoning (QR) Requirement. The Core Requirements provide breadth of knowledge and exposure to methodologies that are foundational for a university education, including the development of critical thinking, analytical, and communication skills in different disciplines within the Faculty of Humanities and Social Sciences. Normally, core requirement courses are offered at the 1000 -level or 2000 -level, and are intended to be completed early in a student's program of study. A student is encouraged to complete the CRW, LS, and QR Requirements within the first 45 credit hours.
A student must complete all Core Requirements, subject to the following conditions:

1. Each eligible course may be used towards both the Core Requirements and applicable Major(s) or Minor requirements.
2. A student who is concurrently completing the Bachelor of Commerce (Co-operative) degree should refer to Joint Degrees of Bachelor of Arts and Bachelor of Commerce (Co-operative).
3. As outlined in Limited Enrolment Courses and Transfer Credits, some Grenfell Campus courses may be eligible to fulfill the Core Requirements, and some limitations on transfer credits apply.
A student, in consultation with an academic advisor, is encouraged to follow Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts. A student interested in a Bachelor of Arts Major in Computer Science, Mathematics, Statistics, or Psychology, or in a Minor in an eligible program outside of the Faculty of Humanities and Social Sciences, should consult an advisor in the appropriate department for suggested course sequencing, in addition to consulting an advisor in the Faculty of Humanities and Social Sciences.
A student in the International Bachelor of Arts (iBA) program is advised to subsequently consider Table 2 Possible Course Sequencing for the iBA (first 60 credit hours).

Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts

| Semester | Suggested Courses |
| :--- | :--- |
| Semester $\mathbf{1}$ (15 credit hours) | Course \#1 (3 credit hours): first course for Critical Reading and Writing (CRW) Requirement <br> should be a 1000-level English CRW course <br> Course \#2 (3 credit hours): first course for Language Study (LS) Requirement <br> Course \#3 (3 credit hours): first course for Quantitative Reasoning (QR) Requirement. Eligible <br> Quantitative Reâsoning courses offered at the 3000-level are normally completed after the first 45 <br> credit hours. <br> Courses \#4-5 (6 credit hours): choose 1000-level courses as electives. Breadth is encouraged. <br> Consider choosing courses in a possible Major and Minor. Programs without 1000-level courses <br> offer 2000-level courses that are ordinarily completed in the first year of study. |
| Semester 2 (15 credit hours) | Course \#6 (3 credit hours): second course for Critical Reading and Writing (CRW) Requirement, <br> ideally in an area of study being considered for the Major. This course can be at the 1000-level or <br> 2000-level. <br> Course \#7 (3 credit hours): second course for Language Study (LS) Requirement <br> Couse \#8 (3 credit hours): second course for Quantitative Reasoning (QR) Requirement. Eligible <br> Quantitative Reasoning courses offered at the 3000-level are normally completed after the first 45 <br> credit hours. <br> Courses \#9-1 (6 credit hours): choose additional electives of interest. Breadth is encouraged. <br> Consider declaring a Major and Minor. |
| Semester 3 (15 credit hours) | Courses \#11-15 (15 credit hours): consider your Major and Minor program requirements, as <br> appropriate. Choose further electives. |

### 6.1.2.1 Breadth of Knowledge Requirement

The Breadth of Knowledge Requirement is designed to ensure that students have exposure to courses in a variety of disciplines and interdisciplinary areas of study within the Humanities and Social Sciences, in order to achieve a well-rounded Humanities and Social Sciences education. To fulfill the Breadth of Knowledge Requirement, a student's Bachelor of Arts program (core, major, minor and electives) must contain at least one course in a minimum of 6 of the following areas of study in the Humanities and/or Social Sciences, chosen from: Anthropology, Archaeology, Classics, Communication Studies, Economics, English, Folklore, French, Gender

Studies, Geography, German, History, Law and Society, Linguistics, Medieval Studies, Philosophy, Police Studies, Political Science, Religious Studies, Russian, Sociology, Spanish courses.

### 6.1.2.2 Critical Reading and Writing (CRW) Requirement

The Critical Reading and Writing Requirement (CRW) is designed to ensure that students develop university-level foundational knowledge and skills in critical reading and writing in the Humanities and/or Social Sciences, as described in the CRW course guidelines available at www.mun.ca/hss/crw. To fulfill the Critical Reading and Writing Requirement, a student must complete a minimum of 6 credit hours in foundational Critical Reading and Writing courses. This shall include 3 credit hours in a 1000 -level CRW course offered by English, and an additional 3 credit hours in any Faculty of Humanities and Social Sciences course whose title begins with "Critical Reading and Writing" chosen from the following eligible courses: Archaeology 1001, 1005, Classics 1001, English 1090 or the former 1080, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103, 1110, Folklore 1005, Gender Studies 1005 or the former 2005, German 1010, History 1005, 1007, 1009-1015, 1300, 1301, Philosophy 1010, 1011, Political Science 1001, Religious Studies 1001. Courses offered at Grenfell Campus using these course numbers are only eligible if they meet the CRW criteria specified above.

1. Normally, students will complete 3 credit hours in an English CRW course, and 3 credit hours in a CRW course in another area of study included in the Breadth of Knowledge Requirement, preferably in the student's respective Major or Minor if available. The foregoing notwithstanding, any student who has completed a minimum of 3 credit hours in any English course may instead elect to fulfill the CRW Requirement by completing 6 credit hours in CRW courses in any disciplines in the Humanities and/or Social Sciences.
2. A Critical Reading and Writing course cannot also be used to fulfill the Language Study Requirement or the Quantitative Reasoning Requirement. Guidelines for CRW courses are maintained by the Faculty's Curriculum and Programs Committee.
3. As outlined in Limited Enrolment Courses and Transfer Credits, limitations exist on the number of transfer credits eligible towards the Core Requirements.

### 6.1.2.3 Language Study (LS) Requirement

The Language Study (LS) Requirement is designed to ensure that students develop university-level foundational knowledge of the structure of a language other than English, and to foster awareness of the inherent link between language and cultural literacy, as described in the LS course guidelines available at www.mun.ca/hss/ls. To fulfill the Language Study Requirement, a student must complete a minimum of 6 credit hours in the study of a single language, other than English, chosen from one of the following languages taught in the Faculty of Humanities and Social Sciences: Ancient Greek, French, German, Hebrew, Innu-aimu, Inuktitut, Italian, Japanese, Latin, Mandarin Chinese, Russian, Sanskrit, Spanish or another language that may be offered by the Faculty. Not all courses in the Department of Modern Languages, Literatures and Cultures or other departments qualify and it is a student's responsibility to refer to the applicable Calendar entry. The guidelines for LS courses are maintained by the Faculty's Curriculum and Programs Committee.

1. A student with competency in one of these languages should check with the respective department to select appropriate universitylevel courses.
2. A student whose first language is not English and who does not meet the standards for entry into regular first-year English courses may use English 1020 and 1021 to fulfill this requirement. University-level credit hours earned in the study of a language other than English at other institutions may be eligible for transfer to fulfill this requirement, including the study of a language not taught at Memorial University of Newfoundland for which unspecified LS credit hours may be awarded. For further information refer to Limited Enrolment Courses and Transfer Credits, Transfers From Other Post-Secondary Institutions.
3. As outlined in Limited Enrolment Courses and Transfer Credits, limitations exist on the number of transfer credits eligible towards the Core Requirements, and approved university-level credit hours earned in the study of a language other than English at other institutions may be eligible for transfer to fulfill this requirement.

### 6.1.2.4 Quantitative Reasoning (QR) Requirement

The Quantitative Reasoning (QR) Requirement is designed to ensure that students develop university-level foundational knowledge and skills in numeracy, quantitative analysis, logical reasoning involving numbers, and/or the graphical representation of data, as described in the QR course guidelines available at www.mun.ca/hss/ar. To fulfill the Quantitative Reasoning Requirement, a student must complete a minimum of 6 credit hours in foundational Quantitative Reasoning courses, through any combination of the following:

1. Eligible Humanities and Social Sciences courses. Archaeology 2450, Economics 1010 or the former 2010, 1020 or the former 2010, 2550; Geography 1050, 2102, 2195, 2302; History 2000; Linguistics 2210, 3850; Philosophy 2030, 2031 or the former 2210, 2211; Political Science 3010, 3350; Sociology 3040, 3041.
2. Eligible Faculty of Science courses (limited to disciplines for which there is a Humanities and Social Sciences Major): Computer Science 1000-level and 2000-level courses; Mathematics 1000-level courses, 2050; Psychology 2910, 2911, 2920; Statistics 1510, 2500, 2550.
Some foundation-level Quantitative Reasoning courses have prerequisites and/or are offered at the 3000 -level. Such courses will normally be completed after the first 45 credit hours. Guidelines for QR courses are maintained by the Faculty's Curriculum and Programs Committee.
As outlined in Limited Enrolment Courses and Transfer Credits, limitations exist on the number of transfer credits eligible towards the Core Requirements.

### 6.1.2.5 Previous Calendar Regulations

A student who has completed any course at Memorial University of Newfoundland prior to September 2015 may choose to follow Core Requirement Calendar regulations from the corresponding previous edition of the University Calendar. For all students, a course section with the former Research/Writing (R/W) designation that was completed prior to September 2015 may be used to fulfil the second Critical Reading and Writing (CRW) course requirement (i.e., all students must complete at least one English course); identifying eligible R/W courses may require consultation with an academic advisor.

### 6.1.3 The Major Program

### 6.1.3.1 Major Programs of Study

Within the 120 credit hours required for a Bachelor of Arts (B.A.) or International Bachelor of Arts (iBA), a student must complete at least one Major program. Major programs are administered by departments and are governed by the following general regulations. In addition to a Major, a student must complete either an eligible Minor, a second Major, or a Joint Major program.

1. Requirements in a Major program, including a list of eligible courses, are found in each individual program's Calendar entry.
2. Major programs available in both the B.A. and iBA that are offered by departments in the Faculty of Humanities and Social Sciences are: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
3. Interdisciplinary Major programs available in the B.A. and which feature courses from multiple programs in the Faculty of Humanities and Social Sciences are offered in the following areas of study: Communication Studies, Law and Society, Medieval Studies, Police Studies.
a. In order to complete a B.A., an Interdisciplinary Major must be combined with a Minor or a second Major in one of: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
b. In order to complete an iBA, an Interdisciplinary Major must be combined with a second Major in one of: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
4. Major programs available in the B.A. whose courses are offered by the Faculty of Science are: Computer Science, Pure Mathematics, Psychology, Statistics. A student completing one of these Major programs must complete at least one additional Major or Minor offered by a department in the Faculty of Humanities and Social Sciences.
5. In departments such as Economics and Geography which offer both Bachelor of Arts and Bachelor of Science programs, a student is free to choose either degree program. A student may not obtain both a Bachelor of Arts and a Bachelor of Science degree in the same Major subject.
6. A student who completes courses at another university in the area of a Major offered by the Faculty of Humanities and Social Sciences may be eligible to transfer some of those credits to fulfill requirements in the Major at Memorial University of Newfoundland. For further information refer to Limited Enrolment Courses and Transfer Credits, Requirement for Courses Delivered at Memorial University of Newfoundland.

### 6.1.3.2 Courses in the Major

1. A student must select courses for the Major program as set forth in the appropriate section of the Calendar.
2. A Major program requires not fewer than 36 and not more than 45 credit hours.
3. Normally, all courses in a Major use the label of that program. If prescribed in a Major program's regulations, the Major may include courses from other disciplines in the Faculty of Humanities and Social Sciences, provided that the Calendar entry of each course emphasizes that discipline.
4. Due to its temporary nature, a special topics course using another program's label shall not normally be included in a Major program.
5. As outlined in Limit on Certain Credit Hours, credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements of all three of a Major, diploma and certificate.
6. A student may complete additional courses in the Major subject area, which may be used as Electives.

### 6.1.4 The Minor Program

### 6.1.4.1 Minor Programs of Study

Within the 120 credit hours required for a Bachelor of Arts (B.A.) or International Bachelor of Arts (iBA), a student must complete either at least one eligible Minor program, a second eligible Major, or a Joint Major program. Minor programs are administered by departments and are governed by the following general regulations.

1. Requirements in a Minor program, including a list of eligible courses, are found in each individual program's Calendar entry.
2. Minor programs available in both the B.A. and iBA that are offered by departments in the Faculty of Humanities and Social Sciences are: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
3. Interdisciplinary Minor programs available in the B.A. and which feature courses from multiple programs in the Faculty of Humanities and Social Sciences are offered in the following areas of study: Law and Society, Medieval Studies. In order to complete a B.A. or iBA, a Minor in one of the these areas of study must be combined with a Major in one of: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
4. A Minor is also available through eligible programs in the Faculty of Business Administration, Faculty of Science and the School of Music. These programs are governed by regulations which are detailed in the Calendar entries for the applicable Faculty or School. A student completing one of these Minor programs must complete a Major offered by a department in the Faculty of Humanities and Social Sciences.
5. A student who completes courses at another university in the area of a Minor offered by the Faculty of Humanities and Social Sciences may be eligible to transfer some of those credits to fulfill requirements in the Minor at Memorial University of Newfoundland. For further information refer to Limited Enrolment Courses and Transfer Credits, Requirement for Courses Delivered at Memorial University of Newfoundland.

### 6.1.4.2 Courses in the Minor

1. A student must select courses for the Minor program as set forth in the appropriate section of the Calendar.
2. A Minor program offered by the Faculty of Humanities and Social Sciences requires not fewer than 24 and not more than 27 credit hours taken in a subject other than that of the Major. Eligible Minors in other eligible Faculties and Schools are a minimum of 24 credit hours.
3. Normally, all courses in a Minor use the label of that program. If prescribed in a Minor program's regulations, the Minor may include courses from other disciplines in the Faculty of Humanities and Social Sciences, provided that the Calendar entry of each course emphasizes that discipline.
4. Due to its temporary nature, a special topics course using another program's label shall not normally be included in the Calendar entry of a Minor program.
5. As outlined in Limit on Certain Credit Hours, credit hours in a course cannot be used to fulfill the requirements of both a Major and a Minor program, or the program requirements of all three of a Minor, diploma and certificate.
6. A student may complete additional courses in the Minor subject area, which may be used as Electives.

### 6.1.5 The Joint Major Program

As an alternative to a Major and Minor, a student may complete a Joint Major, which consists of a minimum of 33 to a maximum of 42 credit hours taken from each of two participating Major programs. The student must fulfill all other requirements of the B.A. or iBA degree, including the minimum of 120 credit hours.

1. Requirements in a Joint Major program, including a list of eligible courses, are found in each individual program's Calendar entry.
2. Students who choose a Joint Major program will have requirements reduced by 3 credit hours in each Major as prescribed in the program's regulations, found in each individual program's Calendar entry.
3. The Joint Major program is available in the following programs only: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Philosophy, Political Science, Religious Studies, Russian, Sociology, Spanish.
4. As an alternative to a Major and Minor or the Joint Major, a student may simultaneously complete a second Major program by fulfilling all regulations for both Major programs. A student may not complete two Majors in any combination of the following: Communication Studies, Computer Science, Law and Society, Pure Mathematics, Medieval Studies, Police Studies, Psychology, Statistics.
5. As outlined in Limit on Certain Credit Hours, credit hours cannot be simultaneously used to fulfill the requirements of both programs in the Joint Major.

### 6.1.6 Electives

In accordance with Regulations outlined under Core Requirements, The Major Program and The Minor Program, a student must complete a minimum of 78 credit hours (of the 120 credit hours for the degree) in Humanities and Social Sciences courses offered by the Faculty of Humanities and Social Sciences. With some limitations, courses offered by the Faculty of Science in Computer Science, Mathematics and Statistics, and Psychology may be applied to this requirement. Electives comprise the remaining 42 credit hours of the total 120 credit hours for the degree.

1. Electives provide students with the opportunity to choose university-level courses from a variety of eligible disciplines. Subject areas that are eligible as electives towards the remaining 42 credit hours for the degree include:
a. Humanities and/or Social Sciences. This includes additional courses in the Major and/or Minor that are over and above the normal requirements for that program of study,
b. Science,
c. Business, and/or,
d. Music (Musicologies and Music Theory and Composition only).
2. Of the 42 credit hours in electives, a student may choose to include up to 15 credit hours in electives in any other subject area, including but not limited to Education, Engineering, Human Kinetics and Recreation, Maritime Studies, Medicine, Nursing, Pharmacy, Social Work, with the exception of courses that are clearly practical or professional
3. Courses with academic demands that are clearly practical or professional, and are not consistent with the Faculty of Humanities and Social Sciences Description, are not eligible for use in any manner towards the Bachelor of Arts. Ineligible courses include but are not limited to:
a. Internships, Student Teaching or Practicum courses (Education),
b. Outdoor Pursuits or Expeditions courses (Environmental Studies),
c. Activities and Coaching courses (Human Kinetics and Recreation),
d. Master Classes (Fine Arts, Theatre),
e. Studio courses (Fine Arts, Visual and Theatre),
f. Applied Music or Ensemble Techniques courses (Music)
g. Nursing Practice or Clinical Practicum courses (Nursing)
h. Structured Practice Experiences (SPE) or Pharmacy Practice Experiences in Pharmacy (Pharmacy), and/or
i. Field Practicum (Social Work).

### 6.1.7 Limit on Certain Credit Hours

1. Eligible credit hours may be used to jointly fulfill the requirements of the Major or Minor and any of the Bachelor of Arts Core Requirements, the iBA additional requirements, a diploma and/or certificate program, subject to certain limitations, including:
a. Credit hours cannot be used to jointly fulfill the requirements of more than one Honours or Major program.
b. Credit hours cannot be used to jointly fulfill the requirements of both a Major and a Minor program.
c. Credit hours cannot be used to jointly fulfill the requirements of all three of a Major or Minor, a diploma and a certificate program. In the event that a course is required in all three programs, and no alternate course option exists, a student shall be guided by Waiver of Regulations for Undergraduate Students - Other Regulations.
2. Additional credit may not be obtained for completing two versions of a crosslisted course (i.e., the same course delivered by two or more academic units).
3. Credit hours awarded for field placement courses in certain Diploma programs are not eligible towards a Bachelor of Arts. This includes English 5000, the former Philosophy 5000, and the former Police Studies 5000.

### 6.2 International Bachelor of Arts (iBA) Degree Regulations

1. The International Bachelor of Arts (iBA) Degree program is designed for students who are interested in the study of global dynamics and worldwide issues from the perspective of the Humanities and Social Sciences. The program's objectives are to provide knowledge and analytical skills essential for research and work on cultural, economic, political, religious and social processes on a global scale. An iBA degree requires, in addition to the requirements of the Bachelor of Arts (B.A.) Degree, a combination of additional university-level language study, completion of designated courses with a clear international focus, and participation in either an international study or internship placement requiring residency outside of Canada.
2. The process for declaring an International Bachelor of Arts (iBA) is the same as for declaring a Bachelor of Arts (B.A.). However, admission to the International Internship Option is limited and competitive.
3. The iBA program is available exclusively to students who complete a Major or Honours program in one of the following Faculty of

Humanities and Social Sciences programs: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, Sociology, and Spanish.
4. The iBA is not available with a Major in an interdisciplinary program (Communication Studies, Law and Society, Medieval Studies, Police Studies) or a Faculty of Science program (Computer Science, Psychology, Pure Mathematics, Statistics) unless the student also completes an eligible Honours or Major program.
5. The iBA is not available to students who are enrolled in a Co-operative Education degree program.
6. Unless otherwise specified, normal Bachelor of Arts regulations apply with respect to Joint programs and Minor programs, including those offered by other Faculties and Schools.

### 6.2.1 International Bachelor of Arts (iBA) Admission and Registration

1. A student shall declare a Major in the Humanities and Social Sciences, normally within the first 45 credit hours, or shall apply for admission to an Honours program in the Humanities and Social Sciences as outlined under Academic Advising and Declaring a Bachelor of Arts.
2. A student who wishes to enter an iBA program is strongly advised to consult an academic advisor and international exchange coordinator early in their university career, as it may not be possible to complete the requirements for the degree in the normal time if the decision to embark on the program is delayed beyond the end of the second year.
3. In accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Degree and Departmental Regulations - Further Credentials, no student shall obtain more than one undergraduate degree from the Faculty of Humanities and Social Sciences.

### 6.2.2 International Bachelor of Arts (iBA) Degree Components

A student for the Degree of International Bachelor of Arts (iBA) must complete a minimum of 120 credit hours in courses subject to the following regulations:

1. A student is required to complete the Core Requirements as detailed in the Regulations for the General Degree of Bachelor of Arts. These include:
a. Breadth of Knowledge Requirement
b. Critical Reading and Writing (CRW) Requirement
c. Language Study (LS) Requirement
d. Quantitative Reasoning (QR) Requirement
2. A student is required to complete a Major Program including a minimum $60 \%$ average, or alternatively an Honours Program including an average of $75 \%$ or better;
3. A student is required to complete a Minor Program including a minimum $60 \%$ average, or alternatively a second Major including a minimum $60 \%$ average;
4. A student is required to complete general Electives; and,
5. As part of the minimum 120 credit hours, an iBA student is also required to complete the following requirements, for which credit hours may be used to jointly satisfy other requirements of the degree:
a. International Studies (IS) Courses Requirement;
b. Additional Language Study (LS) Requirement, and
c. International Experience Requirement.
6. A student must complete all BA requirements, subject to the following conditions:
a. All students are required to follow the regulations pertaining to the Bachelor of Arts unless otherwise specified
b. Grenfell Campus courses and courses completed at other eligible academic institutions may be eligible to satisfy the International Studies (IS) Courses Requirement. As outlined in Limited Enrolment Courses and Transfer Credits, some Grenfell Campus courses may be eligible to fulfill the Core Requirements. A university-level course that involves international study may be eligible if it is demonstrated that it follows the IS course guidelines available at www.mun.ca/hss/IS. The Faculty of Humanities and Social Sciences' Undergraduate Waivers and Appeals Committee is responsible for assessing the eligibility of these courses, in consultation with the applicable academic Unit Head; refer to Waiver of Regulations for Undergraduate Students, Other Regulations.
In consultation with an academic advisor a student is encouraged to follow Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours) and to consider possible course sequencing in the Program Regulations - General and Honours Degrees. A student interested in a Bachelor of Arts Minor in an eligible program outside of the Faculty of Humanities and Social Sciences should consult an advisor in the appropriate department or suggested course sequencing, in addition to consulting an advisor in the Faculty of Humanities and Social Sciences.

Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours)

| Semester | Suggested Course Planning |
| :--- | :--- |
| $\mathbf{1}$ (15 credit hours) | Follow Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts, <br> including 3 credit hours in each of a CRW course, a LS course and a QR course. |
| $\mathbf{2}$ (15 credit hours) | Follow Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts, <br> including 3 credit hours in each of a CRW course, a LS course in the same language as completed in <br> Semester 1, and a QR course. |
| $\mathbf{3}$ (15 credit hours) | Courses \#11-15: <br> Consider Major and Minor program requirements, as appropriate (a Major in the iBA is available only in <br> Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Gender Studies, <br> Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Russian, <br> Sociology, Spanish). <br> Choose a first course for International Studies (IS) Requirement from Table 3 International Studies (IS) <br> Designated Courses, which may be eligible to jointly fulfill requirements of the Major or Minor program. <br> Consider another LS course in a language not yet studied within the parameters of the Additional <br> Language Study (LS) Requirement. |
| $\mathbf{4}$ (15 credit hours) | Courses \#16-20: <br> Consider Major and Minor program requirements. <br> Choose a further 3 credit hours in an IS course. <br> Consider a fourth LS course tof fulfill the Additional Language Study (LS) Requirement, ensuring a <br> maximum of 6 credit hours in languages not actively spoken. <br> Attend an information session about options available forthe International Experience Requirement or <br> the International Internship Option, or speak with an academic advisor. |
| $\mathbf{5 - 8}$ (60 credit hours) | Follow Table 4 Possible Course Sequencing for the iBA, International Study Option (Final 60 Credit <br> Hours). Alternatively, subject to admission to the International Internship Option, follow Table 5 <br> Possible Course Sequencing for the iBA, International Internship Option (Final 60 Credit Hours). |
| Eligible Quantitative Reasoning courses offered at the 3000-level are normally completed after the first 45 credit hours. |  |

### 6.2.3 International Studies (IS) Courses Requirement

1. Certain courses that are offered by the Faculty of Humanities and Social Sciences are found under Course Descriptions, International (IS). For the purposes of course designation, "international" refers to worldwide processes, institutions and peoples in today's global society. It does not refer to the study of a country, a multi-country region, or comparisons of countries or nations. For further information, refer to the International Studies course guidelines at www.mun.ca/hss/IS.
2. Students must complete a minimum of 24 credit hours in designated IS courses listed in Table 3 International Studies (IS) Designated Courses from a minimum of five disciplines, of which at least 6 credit hours must be at the 4000 -level. Disciplines that offer designated IS courses include Anthropology, Economics, English, Folklore, French, Gender Studies, Geography, History, Political Science, Religious Studies, Sociology. As part of their course selections in other areas of the degree, students are encouraged to supplement the International Studies Courses Requirement with the study of related concepts, traditions and phenomena across a variety of disciplines.
3. Up to 3 credit hours in an Honours essay course that clearly encompasses the International Studies course criteria may, upon the recommendation of the Head of Department and approval by the Faculty's Undergraduate Waivers and Appeals Committee, be deemed eligible as an IS course for the purposes of that individual student's program, only.

Table 3 International Studies (IS) Designated Courses


| $3000-L e v e l$ | 4000-Level <br> (Minimum 6 credit hours) |
| :--- | :--- |
| Anthropology 3200, 3083, 3260, 3409, 3452 <br> Economics 3030, 3150 <br> English 3160 <br> Folklore 3100, 3250, 3360 <br> French 3654 <br> Gender Studies 3008, 3025 <br> Geography 3420, 3510, 3620, 3800 <br> History 3030, 3765, 3807, 3811 <br> Political Science 3210, 3220, 3230, 3235, 3250, 3260, <br> 3285, 3290, 3295 <br> Sociology 3260 <br> Anthropology 4415, 4416 <br> Economics 4030, 4031 <br> Folklore 4470 <br> Folklore 4460 or Religious Studies <br> 4460 <br> French 4654 <br> Geography 4300 <br> Holitical Science 4210, 4215, 4230, <br> 4255, 4290 <br> Sociology 4093, 4230 |  |

### 6.2.4 Additional Language Study (LS) Requirement

1. The study of a variety of world languages and cultures is an important component of international study. An iBA student shall complete 12 credit hours in Language Study (LS) courses as follows:
a. 6 credit hours in university-level study of a single language to satisfy the Language Study Requirement; and,
b. 6 additional credit hours in any LS courses, ensuring that no more than 6 credit hours used towards fulfilling the Additional Language Study Requirement are completed in languages that are not actively spoken, including those eligible towards the Certificate in Ancient Languages (e.g., Ancient Greek, Latin, and Sanskrit).
2. A student who completes university-level study of language at another institution may apply for LS transfer credit, including the study of a language not taught at Memorial University of Newfoundland for which unspecified LS credit hours may be awarded.
3. A student whose first language is not English, who does not meet the standards for entry into regular first-year English courses, and who uses English 1020 and 1021 to satisfy the Language Study Requirement, is required to complete 6 credit hours in LS courses to satisfy the Additional Language Study Requirement.

### 6.2.5 International Experience Requirement

Studying or working outside of Canada provides an opportunity for students to immerse themselves in the culture, politics and society of another country. During the program of study and while residing outside of Canada, a student for the iBA degree is required to complete either university-level study (INTL 312L or equivalent) or an approved international internship (INTL 399W). The International Experience Requirement will normally be completed prior to the final semester of the iBA program so that a student may build on the learning experience in remaining courses.

### 6.2.5.1 Student Responsibilities

1. Careful course planning is essential for a student enrolled in the iBA program. Students are encouraged to consult with an academic advisor and international exchange coordinator.
2. A student will normally have completed at least 60 credit hours with a minimum $70 \%$ average, including a minimum of 6 credit hours in designated LS courses and 12 credit hours in designated IS courses, prior to commencement of study outside of Canada.
3. Students must thoroughly research and comply with visa requirements of the county they intend to visit. Visa processing times and requirements may vary depending on the student's nationality, the international experience location, and the nature of the visit.
4. It is assumed that, by virtue of studying at Memorial University of Newfoundland, a student who is not a Canadian citizen has international experience; equally, many Canadian citizens will have acquired international experiences for diverse reasons. Notwithstanding their prior experiences or home country, all students must satisfy either the International Study Option or the International Internship Option while actively enrolled in the iBA program.

### 6.2.5.2 International Study Option

1. The International Study Option is designed for students who have completed 60 credit hours or more. In consultation with an academic advisor, a student is encouraged to follow Table 4 Possible Course Sequencing for the iBA, International Study Option (Final 60 Credit Hours).
2. Between their first registration at Memorial University of Newfoundland and the time of their graduation, a student will complete courses in an approved international study program, or complete an international exchange semester at one of Memorial University of Newfoundland's approved partner institutes. These courses will require residency outside of Canada and are normally to be completed in 12 consecutive weeks.
3. Information about study abroad programs offered by Memorial University of Newfoundland is available at Go Abroad (Harlow Campus and International Field Schools) and from the Office of the Dean of Humanities and Social Sciences.
4. Students must register for INTL 312L at the start of the international study program. Completion of this non-credit hour course will designate fulfillment of the International Study Option. Alternatively, students may complete an appropriate combination of INTL 301L-311L, or the former INTL 399L, to meet the requirement of a minimum of 12 weeks of university-level study while residing outside of Canada. Registration for any of these courses uses the Course Change Form, requiring approval from a member of the Office of the Registrar and an Associate Dean of Humanities and Social Sciences (or designate). The Office of the Registrar must confirm the student's enrollment in approved university-level courses requiring residency outside of Canada (normally a minimum of 9 credit hours). The course shall be added to the transcript upon documentation of completion of such a program of study, normally involving residency outside of Canada a period of 12 weeks, being provided to the Office of the Registrar. Clarification about interpretation of eligibility for INTL 312L (or equivalent) shall be referred to the Faculty's Curriculum and Programs Committee.
5. Alternatively, and normally with prior written approval from the Head of Department, a student may complete a minimum of 9 credit hours instruction in another university-level program requiring study while residing outside of Canada. Before leaving Canada, the student must research the course offerings at the proposed host institute and obtain the course syllabi. These must be submitted along with a Letter of Permission to the Office of the Registrar. The transferability of the courses will be determined before the student commences the international program of study. Upon completion of the program, the student must request that the host institute send the student's transcripts directly to the Office of the Registrar in order for the transcripts to be deemed official. The student must provide complete information about the program and complete an Application for Transfer Credit Evaluation. Documentation must establish that the course(s) was completed while the student was residing outside of Canada, normally for a minimum 12 week duration. If the transfer credits occur within the final 30 credit hours for the degree, an iBA student will not require a waiver of the University residence requirement, provided that all other requirements and University regulations are observed, and provided that courses were taken at university-level institutions which are included in formal institutional exchange agreements with this University and are not subject to the requirements of this residency requirement clause; or with special permission from the Head of the department. For more information regarding transfer of credit, the student should consult with the Faculty's International Exchange Coordinator or the Office of the Registrar.
6. Courses and programs that do not require residency outside of Canada for a minimum 12 week duration are ineligible for the International Study Option.

Table 4 Possible Course Sequencing for the iBA, International Study Option (Final 60 Credit Hours)

| Semesters | Suggested Course Planning |
| :--- | :--- |
| 1-4 (60 credit hours) | Follow Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First <br> 60 Credit Hours), including attending an information session about International Experience <br> Requirement. |
| 5-6 (30 credit hours) | Courses \#21-30 (30 credit hours): <br> While registered for INTL 312L (or equivalent), complete credit hours as part of an approved <br> international study program, or as part of an international exchange semester at an approved <br> partner institute, requiring residency outside of Canada (normally for 12 consecutive weeks). <br> Consider Major and Minor program requirements. <br> Choose 12 credit hours in IS courses, comprised of 3 credit hours in each of four different <br> disciplines. <br> Request a degree audit from the Office of the Registrar and consult an academic advisor for <br> assistance with remaining course selections. |
| $7-8$ (final 30 credit hours) | Courses \#31-40 (30 credit hours): <br> Choose 6 credit hours in IS courses at the 4000-level towards completing the remaining credit hours <br> required for the International Studies (IS) Courses Requirement, ensuring that SS courses have <br> been completed in a minimum of 5 disciplines. <br> Complete remaining requirements for the degree, including the Major and Minor. |

### 6.2.5.3 International Internship Option

1. In lieu of the International Study Option, a small number of internship placements outside of Canada may be available for eligible students during the Fall or Winter semesters. The purpose is to provide a structured work-integrated educational experience that supports the development of intercultural competencies and global citizenship. The educationat experience will be completed between a student's first registration at Memorial University of Newfoundland and the time of their graduation, normally prior to the final semester of the iBA program. The internship should build on a student's prior coursework, education, employment and personal experiences to allow the student to experience workplace culture in a location outside of Canada.
2. Admission to the International Internship Option is limited and competitive, and is available only to full-time students in the iBA program. In consultation with an academic advisor, an admitted student is encouraged to follow Table 5 Possible Course Sequencing for the iBA, International Internship Option (Final 60 Credit Hours).
3. Co-operative Education is responsible for administering the International Internship Option, in consultation with the Head of the student's declared Major(s) and the Office of the Dean of Humanities and Social Sciences as applicable.
4. A student must apply to Co-operative Education. Deadline dates are January 15 (or next business day) for Fall internships, and May 15 (or next business day) for Winter internships.
5. A student will normally have completed at least 60 credit hours, including a minimum of 12 credit hours with a minimum $70 \%$ average in designated IS courses and a minimum of 6 credit hours in designated LS courses, prior to commencement of the internship outside of Canada.
6. General management of the International Internship Option is the responsibility of Co-operative Education, which provides supports to accepted students, including job search preparation, counselling, monitoring during work assignments and evaluating internships. These supports are available exclusively in preparation for a Fall semester internship or Winter semester internship.
7. A student must participate in professional development and debriefing sessions offered by Co-operative Education before and after the placement.
8. As part of admission to the International Internship Option, a student is responsible for identifying and securing a prospective internship to be completed during the program of study. Internships must be full-time (normally paid) and must be at least 12 weeks duration within the dates for Fall or Winter semesters specified in the University Diary. Students are strongly advised to complete all arrangements and secure approval before travelling internationally. All internships must be approved in writing by Co-operative Education, in consultation with the Head of the relevant academic unit, before the first day of the internship.
9. Students must register for INTL 399W (International Internship) during the approved internship. Registration for INTL 399W uses the Course Change Form, requiring approval from Co-operative Education and an Associate Dean of Humanities and Social Sciences (or designate). Co-operative Education must confirm that a full-time work or voluntary experience for at least 12 weeks duration in a location outside of Canada has been arranged. Students are required to complete the internship reporting requirements as set out by Co-operative Education. Completion of INTL 399W will designate fulfillment of the International Internship Option. The evaluation of the internship by Co-operative Education will result in one of the following grades being awarded: pass with distinction, pass, or fail. Clarification about interpretation of eligibility of a full-time or voluntary experience for INTL 399W shall be referred to the Faculty's Curriculum and Programs Committee.
10. Regardless of the location of an international internship, the employer must have sufficient command of the English language to communicate with Co-operative Education personnel.
11. Students who drop INTL 399W without approval from Co-operative Education or who fail to honour an agreement to work with an employer, or conduct themselves in a manner which results in their discharge from the internship, will normally be awarded a grade of fail for INTL 399W and will not be eligible to re-apply to the International Internship Option.
12. A student who completes an equivalent internship position outside of Canada as part of another university-level academic program should contact Co-operative Education and the Office of the Registrar about the possibility of receiving INTL 399W as transfer credit.
13. In extenuating circumstances, duly authenticated, a student may apply for permission from the Undergraduate Waivers and Appeals Committee to self-initiate and complete a work placement during the Fall or Winter semester within Canada involving an equivalent immersion in international cultures. As per Waiver of Regulations for Undergraduate Students, Other Regulations, a detailed rationale for the request must be must be made in writing to the Secretary of the Undergraduate Waivers and Appeals Committee, Faculty of Humanities and Social Sciences. Prior to doing so a student is expected to meet with Co-operative Education to discuss requirements associated with the proposed equivalency placement.

Table 5 Possible Course Sequencing for the iBA, International Internship Option (Final 60 Credit Hours)

| Semester | Suggested Course Planning |
| :--- | :--- |
| $\mathbf{1 - 4}$ (60 credit hours) | Follow Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First <br> 60 Credit Hours), including attending an information session about International Internship <br> Option. |
| $\mathbf{5 - 6}$ (30 credit hours) | Courses \#21-30: <br> Consider Major and Minor program requirements. <br> Choose 12 credit hours in IS courses, comprised of 3 credit hours in each of four different <br> disciplines. <br> Request a degree audit from the Office of the Registrar and consult an academic advisor for <br> assistance with remaining course selections. <br> Apply to Co-operative Education for entry into the International Internship Option at least eight <br> months before commencing work for the internship. |
| $\mathbf{7}$ (15 credit hours) | Courses \#31-35: <br> Choose 3 credit hours in an IS course at the 4000-level. <br> Consider Major and Minor program requirements. |
| $\mathbf{8}$ (Fall or Winter only) (3 credit |  |
| hours) | Course \#36: <br> INTL 399W while completing an approved internship outside of Canada. |
| $\mathbf{9}$ (final 12 credit hours) | Courses \#37-40: <br> Choose 3 credit hours in an IS course at the 4000-level towards completing the remaining credit <br> hours required for the International Studies (IS) Courses Requirement, ensuring that IS <br> courses have been completed in a minimum of 5 disciplines. <br> Complete remaining requirements for the degree, including the Major and Minor. |

### 6.2.6 International Bachelor of Arts (iBA) as a Second Degree

A student who has been previously awarded a General Degree of Bachelor of Arts or a Bachelor of Arts Honours degree is not eligible to complete or be awarded the International Bachelor of Arts (iBA) degree.

### 6.2.7 Previous Calendar Regulations

An International Bachelor of Arts (iBA) student who, prior to September 2017, completed an eligible course that subsequently received the IS designation may use up to 15 credit hours towards the International Studies (IS) Courses Requirement. Eligible courses completed before September 2017 are limited to Anthropology 2412, 2413, 4416; Anthropology 3260 or Sociology 3260; Economics 3030, 4030, 4031; Folklore 3250, 4470; Geography 2102, 3510, 3800, 4300; History 2500, 2510, 2800, 3030; French 3654; Political Science 2200, 3210, 3220, 3250, 3290, 4215, 4230, 4255; Sociology 2250, 4230, 4093. Normal requirements for credit hours from five disciplines and for 4000-level credit hours continue to apply.

### 6.3 Graduation Requirements for the Bachelor of Arts and International Bachelor of Arts (iBA) General Degrees

1. In order to graduate with the Bachelor of Arts General Degree, a student shall obtain:
a. an overall average of $60 \%$ or higher on the minimum number of courses prescribed for The Major Program and,
b. an average of $60 \%$ or higher on the minimum number of courses prescribed for The Minor Program.
2. In order to graduate with the International Bachelor of Arts (iBA) General Degree, a student shall obtain:
a. an overall average of $60 \%$ or higher on the minimum number of courses prescribed for The Major Program,
b. an average of $60 \%$ or higher on the minimum number of courses prescribed for The Minor Program, and
c. an average of $70 \%$ or higher in the minimum number of designated International Studies (IS) courses prescribed for the International Studies Courses Requirement.
3. Students must apply to graduate by the appropriate deadline through the Memorial Self-Service under the Graduation section. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

### 6.4 Bachelor of Arts (Honours) and International Bachelor of Arts (iBA) (Honours) Degree Regulations

1. A program is offered leading to the Honours Degree of Bachelor of Arts and the Honours Degree International Bachelor of Arts (iBA). The Bachelor of Arts Honours and the iBA degrees require, over and above the requirements of the General Degree, a concentration at an advanced level in an approved field, consisting of a subject or subjects of specialization and/or related subjects, and a high quality of work throughout the program. An Honours degree is of distinct advantage to students who plan advanced work or careers in their chosen fields and also to those who have a clear commitment to some special field of study. An Honours degree with first or second class standing is, in many cases, a prerequisite for admission to a graduate program.
2. A student completing a degree program in the Faculty of Humanities and Social Sciences will normally follow the degree regulations in effect in the academic year in which the student first entered Memorial University of Newfoundland. This is determined by the year of the student number. However, a student may elect to follow subsequent regulations introduced during the student's tenure in the program.

### 6.4.1 Admission and Registration

1. Admission to Honours programs is competitive and limited, depending upon available resources. A student should consult the criteria established for the program in question. To be considered for admission to an Honours program, a student shall submit an "Application for Admission to Honours" form to the Office of the Registrar. The application may be obtained at www.mun.ca/regoff/Application-Honours-Program-07-18.pdf. The application must be approved by the Head of the Department or Program Supervisor of the Subject of Specialization before the student can be admitted to the program.
2. A student who wishes to enter an Honours program is strongly advised to consult the Head of the Department or Program Supervisor at the earliest possible date, as it may not be possible to complete the requirements for the degree in the normal time if the decision to embark on the program is delayed beyond the end of the second year.
3. A student who has been awarded the General Degree of Bachelor of Arts may convert it to an Honours Degree of Bachelor of Arts by applying to the department of specialization and the Registrar and, upon approval of such application by the Department, completing the requirements for the Honours degree as set forth in the regulations. Similarly, a student who has been awarded the General Degree of International Bachelor of Arts may convert it to an Honours Degree of International Bachelor of Arts by following the same process.
4. Upon entering the program, the student shall be assigned a Faculty Advisor by the Head of the Department or Program Supervisor. The Faculty Advisor will be responsible for advising the student and the Head of the Department or Program Supervisor with respect to the student's program of studies.

### 6.4.2 Subjects of Specialization

Subjects which may be chosen as Subjects of Specialization for the Honours Degree of the Bachelor of Arts or the Honours Degree of the iBA are the following:

1. Those administered by Departments in the Faculty of Humanities and Social Sciences by the Head of the Department: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Sociology.
2. Bachelor of Arts Honours Programs are also available in and administered by the following Faculty of Science Departments: Computer Science, Mathematics and Statistics, Psychology. These programs require a Minor, or alternatively a second Major, in the Bachelor of Arts offered by a Department in the Faculty of Humanities and Social Sciences.

### 6.4.3 Course Requirements

A student for the Honours Degree of Bachelor of Arts or the Honours Degree of the iBA shall complete a program of studies that shall consist of not fewer than 120 credit hours subject to the following regulations:

1. A student is required to complete the Core Requirements as detailed in the Regulations for the General Degree of Bachelor of Arts. These include:
a. Breadth of Knowledge Requirement
b. Critical Reading and Writing (CRW) Requirement
c. Language Study (LS) Requirement
d. Quantitative Reasoning (QR) Requirement
2. A student must also:
a. Pass a general comprehensive examination in a Subject of Specialization. This examination may be written, or oral, or a combination of both. The comprehensive examination shall count as 3 credit hours in the Subject of Specialization; and/or
b. Submit an Honours essay on an approved topic which, at the discretion of the Head of the Department or the Program Supervisor, may be followed by an oral examination thereon. Normally, the Honours essay will count as 3 credit hours in the Subject of Specialization, or as 6 credit hours in the case of linked (A/B) Honours essays (please consult departmental regulations).
The semester in which the student sits for the comprehensive examination, and/or the semester in which the Honours essay is to be submitted, may be decided by the student after consultation with the Head of the Department or Program Supervisor.
A copy of the Honours essay must be submitted to the University Library upon completion. All Honours essays in the University Library shall be available for unrestricted consultation by students and faculty except under very exceptional circumstances, which must be approved by the Head of the department concerned. Copyright remains with the author. A signed release form must accompany an essay or dissertation when it is submitted to the University Library.
3. Further courses shall be chosen either
a. in consultation with the Fâculty Advisor and with the approval of the Head of the Department or Program Supervisor of the Subject of Specialization. The student's program shall include not fewer than 60 credit hours in courses applicable to the Subject of Specialization, including the comprehensive examination and/or the Honours essay, at least 36 of which must be at the 3000 level or above, and not fewer than 24 credit hours in a Minor subject or program according to the Departmental or Program Regulations covering that Minor, and the total number of credit hours which may be applied to the degree is not fewer than 120; or
b. in consultation with the Faculty Advisor and with the approval of the Head of the Department or Program Supervisor of the Subject of Specialization. The student's program shall include not fewer than 60 credit hours in courses applicable to the Subject of Specialization, including the comprehensive examination and/or the Honours essay, at least 36 of which must be at the 3000 level or above, and not fewer than 36 credit hours in a Major subject or program according to the Departmental or Program Regulations governing that Major, and the total number of credit hours which may be applied to the degree is not fewer than 120; or
c. a student may complete the Joint Honours program.

### 6.4.4 Departmental Regulations

A student for Honours degrees shall also comply with such additional requirements of the appropriate Department(s) as are approved by the Senate and printed in the Calendar.

### 6.4.5 The Joint Honours Program

As an alternative to a Major and Minor, a student may complete a Joint Honours, which consists of a minimum of 42 to a maximum of 51 credit hours taken from each of two participating Honours programs. The student must fulfill all other requirements of the B.A. or iBA degree, including the minimum of 120 credit hours.

1. Students who choose a Joint Honours program will have requirements reduced in each Honours program as prescribed in the program's regulations and found in each individual program's Calendar entry.
2. The Joint Honours program requires completion of an Honours program in at least one of the following: Anthropology, Archaeology, Classics, Economics, English, Folklore, French, Geography, German, History, Linguistics, Philosophy, Political Science, Religious Studies, Sociology.
3. The student's program shall include not fewer than 42 and not more than 51 credit hours in courses approved for each of the Subject of Specialization, including the comprehensive examination and/or the Honours essay, of which at least 27 shall be at the 3000 level or above in each of the Subjects of Specialization, and the total number of credit hours which may be applied to the degree is not fewer than 120.
4. A student in the Joint Honours program may choose the Subject of Specialization for the Honours essay and/or comprehensive examination.
5. As outlined in Limit on Certain Credit Hours, credit hours cannot be simultaneously used to fulfill the requirements of both programs in Joint Honours.

### 6.5 Graduation Requirements for the Bachelor of Arts (Honours) and the International Bachelor of Arts (iBA) (Honours) Degrees

### 6.5.1 Academic Standing - Bachelor of Arts (Honours) and the International Bachelor of Arts (iBA) (Honours) Degrees

A student for the Bachelor of Arts (Honours) or the International Bachelor of Arts (iBA) (Honours) degree shall complete a program of studies that shall consist of not fewer than 120 credit hours subject to the following regulations:

1. In order to graduate with a Bachelor of Arts (Honours) or the International Bachelor of Arts (iBA) (Honours) degree, a student shall obtain:
a. a grade of $70 \%$ or better, or an average of $75 \%$ or higher in the minimum number of courses (including the required courses in the Honours subject(s) prescribed by the Department or, in the case of Joint Honours, Departments concerned. A grade of $70 \%$ or better must be obtained in the Honours essay and/or comprehensive examinations;
b. an average of at least 2.75 points on the total number of credit hours in the courses required for the degree. (See General Academic Regulations (Undergraduate), Classification of General Degrees); and
c. an average of $70 \%$ or higher in the minimum number of designated International Studies (IS) courses prescribed for the International Studies Courses Requirement for students completing the International Bachelor of Arts (iBA) (Honours) degree.
Note: A student may, with the written approval of the Head of the Department and the Faculty's Undergraduate Waivers and Appeals Committee, repeat or substitute up to three courses in order to meet the requirements of Clause 1. above. In counting repeats, each attempt at the same course will count as one course towards the maximum. That is, the same course, repeated three times, would place a student at the maximum and no additional repeats or substitutions would be allowed. The Honours essay and/or comprehensive examinations may not be repeated or substituted.

### 6.5.2 Classification of Degrees

1. If a student's general average is 3.25 points or better per credit hour in required courses and the student's average is 3.5 points or better per credit hour in the courses in the Honours subject, the student shall be awarded an Honours degree with First Class standing.
2. If a student fulfils the conditions of Academic Standing above but not of Regulation 1. under Classification of Degrees, the student shall be awarded an Honours degree with Second Class standing.
3. No classification will be given to the degree awarded a student who has completed (1) fewer than one half of the courses required for the degree at this University, or (2) who has completed fewer than one half of the courses required for the degree at this University since 1959. All students for such degrees shall, however, fulfil the condition of Academic Standing above on the courses taken at this University since September 1959 in order to qualify for the degree.
4. A declared student for an Honours degree who fails to attain the academic standing specified in Academic Standing above but fulfils the academic requirements for a General degree shall be awarded a General degree, the classification of which shall be determined in accordance with General Academic Regulations (Undergraduate), Classification of General Degrees.

### 6.6 Regulations Governing Co-operative Education Program

1. Co-operative Education programs are offered in the Department of Archeology, Department of Economics and Department of Political Science.
2. A student who transfers from a Co-operative Education degree program to an International Bachelor of Arts (iBA) degree program may, with permission of the Faculty's Undergraduate Waivers and Appeals Committee and the Head of the department, be permitted to satisfy INTL 399W with the successful completion of a respective Major program work term that was completed outside of Canada.

### 6.7 Joint Degrees of Bachelor of Arts and Bachelor of Commerce (Co-operative)

In order to meet all of the requirements of the Bachelor of Arts and Bachelor of Commerce (Co-operative) degree programs at the same time, students who are completing the joint degrees are strongly advised to follow the Suggested Program of Studies outlined below, to take account of the accompanying advisory notes, and to seek advice from the department or program of their Major in order to ensure that their proposed program is possible within the constraints of course scheduling and prerequisites.
See General Academic Regulations (Undergraduate), Residence Requirements, Second Degree.

### 6.7.1 Suggested Program of Studies for the Bachelor of Arts and Bachelor of Commerce (Co-operative) Prior to admission to the Bachelor of Commerce (Co-operative) Program

For the joint degrees of Bachelor of Arts and Bachelor of Commerce (Co-operative), students must successfully complete a minimum of 150 credit hours in courses applicable to the degrees. To be eligible for admission to Term 1 of the Bachelor of Commerce (Cooperative) program, an applicant must have successfully completed 30 credit hours with an overall average of at least $65 \%$ on the courses comprising those credit hours. The 30 credit hours must comprise:

1. 6 credit hours in English courses which must include either English 1021 or 1110;
2. either Mathematics 1090 (or 109A/B) and 1000 or Mathematics 1000 and 3 credit hours in one of a language other than English or in the subject of the intended Major program;
3. Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020);
4. Business 1000 ; and
5. 9 additional credit hours in non-Business courses. It is strongly recommended that these 9 credit hours include courses in a language other than English and courses in the subject of the intended Major program as the Bachelor of Arts degree requires 6 credit hours in single language other than English.
Following admission to the Bachelor of Commerce (Co-operative) program, the curriculum is as set out below in Table 1 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with The Degree of Bachelor of Arts).
Please refer to the Calendar entry for the Faculty of Business Administration for complete course descriptions and regulations for the Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts.

Table 1 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with the Bachelor of Arts)

| Terms A/B | 6 credit hours in English courses which must include English 1110 or 1021 Mathematics 1000 Economics 1010 (or the former 2010) and Economics 1020 (or the former 2020) Business 1000 <br> 12 additional credit hours in non-Business electives [see Note 1. below] |
| :---: | :---: |
| Fall Academic Term 1 | Business 1101 <br> Business 1210 <br> Statistics 2500 <br> 6 credit hours chosen from: Business 1600, Business 2010, Business 2400, Business 2710, and 3 credit hours in Major, Core or elective courses [see Note 1. below] |
| Winter Academic Term 2 | Business 2101 <br> Business 2210 <br> Remaining 9 credit hours chosen from: Business 1600, Business 2010, Business 2400, Business 2710, and 3 credit hours in Major, Core or elective courses [see Note 1. below] |
| Spring | [see Note 2. below] ( ) |
| Fall <br> Academic Term 3 | Business 300W <br> Business 3310 <br> Business 3401 <br> Business 3700 <br> At least 6 credit hours in Major, Core orelective courses [see Note 3 below] |
| Winter | Business 399W [see Note 2. below] |
| Spring Academic Term 4 | Business 4000 <br> Business 4050 <br> Business 4320 <br> Business 4330 <br> Business 4500 |
| Fall | Business 499W [see Note 2. below] |
| Winter Academic Term 5 | Business 5301 <br> At least 12 credit hours in Major, Core or elective courses [see Note 3. below] |
| Spring | Business 599W [see Note 2 below] |
| Fall <br> Academic Term 6 | Business 7000 <br> At least 12 credit hours in Major, Core or elective courses [see Note 3. below] |
| Winter Academic Term 7 | At least 15 credit hours in Major, Core or elective courses [see Note 3. below] |

Notes: 1. The Bachelor of Arts requires completion of a Major Program, a Minor Program, a set of Core Requirements (comprising a Breadth of Knowledge Requirement, a Critical Reading and Writing (CRW Requirement), a Language Study (LS) Requirement, a Quantitative Reasoning (QR) Requirement), and Elective courses, totalling at least 78 credit hours in courses offered by departments within the Faculty of Humanities and Social Sciences. Majors are also available from the following Departments in the Faculty of Science: Computer Science, Mathematics and Statistics, and Psychology provided that additional credit hours are completed in Humanities and/or Social Sciences courses as stipulated below. When the Bachelor of Arts is completed jointly with the Bachelor of Commerce (Co-operative):
a. Minor program requirements are satisfied by Business courses specified in Table 1 Bachelor of Commerce (Co-operative) Curriculum (Completed Jointly with the Degree of Bachelor of Arts).
b. Core requirements for English Critical Reading and Writing (CRW) courses and Quantitative Reasoning (QR) are satisfied by courses completed in Terms A/B or during Terms 1 or 2 of the Bachelor of Commerce (Co-operative) degree. English 1021 does not qualify as a CRW course except for students completing the Joint Degrees of Bachelor of Commerce (Co-operative) and Bachelor of Arts.
c. It is recommended that the Core Requirement for 6 credit hours in courses in a single language other than English be completed in Terms A/ $B$ of the Bachelor of Commerce (Co-operative) degree program.
d. Major requirements for the Bachelor of Arts may be satisfied in 36 to 45 credit hours, depending on the department or program chosen. Students are strongly recommended to seek advice from the department or program of their Major to ensure that their proposed degree program is possible within the constraints of course scheduling and prerequisites. When a Major is completed in Computer Science, Mathematics. Statistics or Psychology, all credit hours used to fulfill the B.A. Core Requirements (excluding the Quantitative Reasoning Requirement) and the B.A. Electives must be completed in Humanities and/or Social Science areas of study listed in the Bachelor of Arts Breadth of Knowledge Requirement.
2. Students are advised that, in order to complete the joint degrees within the minimum 150 credit hours, they must complete at least five of the courses required for the Bachelor of Arts as opportunities arise and as courses are offered. These courses may be completed during the Spring semesters between Terms A/B and Term 1, between Terms 2 and 3, or during any of the three Work Terms (for example, in the evening or by distance), or as sixth courses during any of the academic terms (following submission of a course load waiver).
3. To meet the requirements for the Bachelor of Commerce (Co-operative), not fewer than 15 and not more than 36 credit hours in Business electives must be chosen from Table 3 Business Electives. Students intending to complete the joint degrees in the minimum number of 150 credit hours should ensure that at least 78 of these credit hours are completed in courses offered by departments within the Faculty of Humanities and Social Sciences. Subject to the aforementioned limitations, Majors are also available from the following Departments in the Faculty of Science: Computer Science, Mathematics and Statistics, and Psychology. Careful planning, particularly in the selection of elective courses as well as in the sequence of Major program courses, is therefore recommended to ensure timely completion of the joint degrees.

### 6.8 Joint Degrees of Bachelor of Arts and Bachelor of Science

Students who wish to simultaneously pursue a Bachelor of Arts program and a Bachelor of Science program may do so by completing a minimum of 135 credit hours in courses, rather than the minimum of 150 credit hours required under UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate), Residence Requirements - Second Degree.
Students who complete the Joint Degrees of Bachelor of Arts and Bachelor of Science are not required to complete a Minor. Students may complete the requirements for a Minor, or an additional (third) Major, in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Degree and Departmental Regulations - Further Credentials.
Credit hours earned in Computer Science, Economics, Geography, Mathematics and Statistics, and Psychology may be eligible to simultaneously satisfy a requirement for credit hours in the Faculty of Humanities and Social Sciences and a requirement for credit hours in the Faculty of Science.
Careful planning of courses is crucial to ensure timely completion of the Joint Degrees of Bachelor of Arts and Bachelor of Science. Students enrolled in this program, or who plan to enroll in this program, are strongly encouraged to consult regularly with appropriate academic advisors in both the Faculty of Humanities and Social Sciences and the Faculty of Science. It may not be possible to complete the requirements for the Joint Degrees in the normal time if the decision to embark on the program is delayed.
Students who have enrolled in the Joint Degrees of Bachelor of Arts and Bachelor of Science must satisfy all program requirements before they may be granted either the degree of Bachelor of Arts or the degree of Bachelor of Science, and must graduate with both degrees at the same convocation.

1. The minimum of 135 credit hours for the Joint Degrees of Bachelor of Arts and Bachelor of Science shall include:
a. a Major program chosen from those Majors offered by departments within the Faculty of Humanities and Social Sciences, with the exception of Majors offered by the Department of Computer Science, the Department of Mathematics and Statistics, and the Department of Psychology;
b. a Major program chosen from those Majors offered by departments within the Faculty of Science, with the exception of Majors offered by the Department of Economics and the Department of Geography
c. the Core Requirements for the Faculty of Humanities and Social Sciences (including the Breadth of Knowledge Requirement, the Critical Reading and Writing (CRW) Requirement, the Language Study (LS) Requirement, and the Quantitative Reasoning (QR) Requirement), for which the Quantitative Reasoning Requirement shall be satisfied by 6 credit hours in Mathematics and Statistics courses;
d. 6 credit hours in courses from each of two Sciences other than Mathematics and Statistics courses;
e. a total of at least 78 credit hours in courses offered by departments within the Faculty of Humanities and Social Sciences, and a total of at least 78 credit hours offered by departments within the Faculty of Science; and
f. no more than 6 credit hours in courses offered by a Faculty or School other than the Faculty of Humanities and Social Sciences or the Faculty of Science.
While the Joint Degrees of Bachelor of Arts and Bachelor of Science is available to all Major programs offered by the Faculty of Humanities and Social Sciences and the Faculty of Science, students pursuing a Major outside of Computer Science, Economics, Geography, Psychology, Pure Mathematics or Statistics should pay special attention to course planning and selection to ensure that this requirement is met within the required 135 credit hours.
2. Admission to the Major programs shall be governed by Faculty of Humanities and Social Sciences - Admission to the Bachelor of Arts General Degree Programs and Faculty of Science - Admission.
3. Students who have already completed a bachelor's degree are not eligible to complete the Joint Degrees of Bachelor of Arts and Bachelor of Science, but may separately complete a Bachelor of Arts or a Bachelor of Science in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Residence Requirements - Second Degree.

## 7 Diploma Programs

www.mun.ca/hss/prôgrams/undergraduate/diplomas
Diploma Programs in the Faculty of Humanities and Social Sciences are of distinct advantage to students who wish to complement their studies in one or more fields of specialization. Students can choose programs that either develop knowledge relevant to growing sectors of the economy and to areas of increasing social concern, or enable exploration of a concentrated subject from a variety of disciplinary perspectives. Diploma programs tend to provide more in-depth study of a specialized area than certificate programs do and consequently feature more course options at an advanced level of study.
The Faculty of Humanities and Social Sciences offers the following diploma programs:

1. Diploma in Ancient Worlds
2. Diploma in Creative Writing
3. Diploma in Environmental Humanities
4. Diploma in Geographic Information Sciences
5. Diploma in Humanities
6. Diploma in Police Studies
7. Diploma in Stage and Screen Technique

### 7.1 General Regulations for Diploma Programs

1. A diploma program is administered by a Program Coordinator. The Coordinator is normally affiliated with the Faculty of Humanities and Social Sciences department that is primarily responsible for the Program's administration.
2. Diploma programs consist of between 24 and 36 credit hours in courses as specified in individual programs.
3. Subject to limitations outlined in Limit on Certain Credit Hours, courses satisfying the Honours, Major, Minor and elective components of an undergraduate degree may also be used to satisfy the requirements of a diploma program. Departmental prerequisites for courses are applicable. This may increase the number of stated courses required for completion of the diploma program. Such courses may be eligible towards other components of the Bachelor of Arts.
4. Normal credit restrictions apply. It is the student's responsibility to recognize that additional credit may not be obtained for completing two versions of a cross-listed course (i.e., the same course delivered by two or more departments).
5. A Program Coordinator may, in consultation with the Head of the relevant academic unit, request permission from the Faculty's Undergraduate Waivers and Appeals Committee for a course to be added to the program.
6. A student may apply to the Faculty's Undergraduate Waivers and Appeals Committee to have a maximum of 3 credit hours from an Honours essay course applied to a diploma program. It must be clearly demonstrated that the entirety of the Honours essay course content is relevant to the program. This may not be used to substitute credit hours in a core course.
7. Due to their temporary nature, "special topics" courses are not listed in the entries for a diploma program. However, a special topics course may be included in a student's program of study with permission from the Faculty's Undergraduate Waivers and Appeals Committee.
8. A student who completes courses at another university in the area of a Diploma offered by the Faculty of Humanities and Social Sciences may be eligible to transfer some of those credits to fulfill requirements in the Major at Memorial University of Newfoundland. For further information refer to Limited Enrolment Courses and Transfer Credits, Requirement for Courses Delivered at Memorial University of Newfoundland.

### 7.2 Admission

Students seeking information about specific diploma programs should contact the Diploma Program Coordinator, the Office of the Dean of Humanities and Social Sciences, or the Office of the Registrar.

1. Admission to all diploma programs is competitive and limited, depending upon available resources. For additional requirements stipulated by individual diploma programs, see the appropriate Calendar entry below.
2. All applicants for diploma programs must also be admitted to the University. The application for admission or readmission is submitted online; current and returning Faculty of Humanities and Social Sciences applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. A complete application package includes an application to the University, an application to the Diploma Program, and any other required documentation (for those who have not attending Memorial University of Newfoundland in the three preceding semesters). Details are available under UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate).
3. Applicants for admission to diploma programs must apply by completing the appropriate form available at the Faculty of Humanities and Social Sciences website or from the Office of the Registrar.

### 7.3 Graduation Requirements

1. To be eligible for the award of a diploma, a student must have obtained an overall average of $60 \%$ or higher in the courses prescribed for that program.
2. As per Limited Enrolment Courses and Transfer Credits, Requirements for Courses Delivered by Memorial University of Newfoundland a minimum of 12 credit hours in courses prescribed for the diploma program must be completed at this University.
3. Students must apply to graduate by the appropriate deadline through the Memorial Self-Service under the Graduation section. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation/.

### 7.4 Diploma in Ancient Worlds

www.mun.ca/hss/ancientworlds
www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Ancient Worlds is administered by the Department of Archaeology.
The Diploma in Ancient Worlds is designed for those who are interested in the study of the history, customs, and culture of the Ancient World. The program's objective is to offer students a representative breadth of knowledge about the Ancient World. It is structured around introductory and advanced courses in Archaeology, Classics, History, Philosophy, and Religious Studies and promotes familiarity with at least three disciplines among the five offered. The program also includes Archeology 2583, an introduction to applied archaeology. The core skills and competencies taught in the course of the program will prepare students for pursuing studies in a variety of interdisciplinary fields.

### 7.4.1 Faculty of Humanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.4.2 Advising

Throughout their program of study, students shall contact an academic advisor or the Coordinator of the Diploma in Ancient Worlds for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.4.3 Declaring the Diploma in Ancient Worlds

Students wishing to declare a Diploma in Ancient Worlds are encouraged to consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 7.4.4 Regulations for the Diploma in Ancient Worlds

As part of the Diploma in Ancient Worlds, students must complete courses up to and including the 3000 level and may take courses at the 4000 level. The Diploma in Ancient Worlds consists of 27 credit hours, as prescribed below:

1. Archaeology 1000 or the former 1030, 2480, and 2583 (or the former 3583), and
2. 18 credit hours from Table 1 Approved Courses for the Diploma in Ancient Worlds, which must include 3 credit hours in at least two of Classics, History, Religious Studies, Philosophy. This may include no more than 6 credit hours in designated Language Study courses and no more than 6 additional credit hours from Archaeology.
The Calendar description of courses eligible for the diploma place an emphasis on the study of ancient history, culture, and/or customs that pre-dates the Middle Ages (i.e., before 500 A.D.). With the prior written permission of the Program Coordinator and the Faculty's Undergraduate Waivers and Appeals Committee, credit hours may be completed in eligible courses not listed in Table 1 Approved
Courses for the Diploma in Ancient Worlds provided that the Faculty of Humanities and Social Sciences course calendar description
is clearly related to the diploma's objectives. An approved list is maintained at www.mun.ca/hss/ancientworlds.
Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning, and to generally follow Table 2 Suggested Course Sequencing for the Diploma in Ancient Worlds.

Table 1 Approved Courses for the Diploma in Ancient Worlds

| Archaeology 1000 or the former 1030, 2480, 2481, 3290, 3500, | Philosophy 2201, 3010, 3020, or the former 2701, 3730, 3740 |
| :--- | :--- |
| $3505,3510,3515,3580,3585-3586,3687$ |  |
| Classics - any course | Religious Studies 1050, 1051, 1060, 1061, 2050, 2051, 2420, <br> $3010,3020,3031,3091, ~ 3251, ~ 3305, ~ 3310, ~ 3411, ~ 3431, ~ 3432, ~$ <br> 3600 |
| History 2020, 2031, 2035, 2041, 2042, 3270, 3930 |  |

Table 2 Suggested Course Sequencing for the Diploma in Ancient Worlds
First 9 credit hours: Archaeology 1000 or the former 1030, 6 credit hours from Table 1 Approved Courses for the Diploma in Ancient Worlds courses (breadth encouraged)

Next 9 credit hours: Archaeology 2480, 6 credit hours from Table 1 Approved Courses for the Diploma in Ancient Worlds courses (breadth encouraged)
Final 9 credit hours: Archaeology 2583 (or the former 3583) and 6 credit hours from Table 1 Approved Courses for the Diploma in Ancient Worlds courses (ensure Diploma minimum of two of Classics, History, Religious Studies and Philosophy; no more than 6 credit hours in Language Study courses; no more than a total of 15 credit hours in Archaeology)

### 7.4.5 Course Prerequisites

Many approved courses are suitable for students in all disciplines without a background in the given discipline. Other approved courses may have prerequisites. Students who are enrolled in the Diploma in Ancient Worlds program and who do not meet the prerequisites for Archaeology 2583 will normally be granted written permission to enroll by the course instructor and the Head of the Department of Archaeology.

### 7.5 Diploma in Creative Writing

www.mun.ca/english/dcw
www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Creative Writing is administered by the Department of English.
The Diploma in Creative Writing gives students the opportunity to work intensively in a variety of creative genres, such as fiction, poetry, drama, screenwriting, and creative non-fiction. The overall aim of the program is to help students develop vigorous and robust writing practices through a focus on the composition, critiquing, and peer-editing of the students' own work together with close reading and analyses of models.

### 7.5.1 Faculty of Humanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.5.2 Advising

Throughout their program of study; students shall contact an academic advisor or the Coordinator of the Diploma in Creative Writing for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.5.3 Admission Requirements

Students will be admitted to individual creative writing courses (except the introductory course, English 2905) based on writing portfolios they submit to the course instructor. Students interested in taking a creative writing course should contact the Program Coordinator or course instructor a minimum of one month prior to the start of the semester to discuss portfolio requirements (usually five to ten pages of the student's best writing in the appropriate genre). A student will be notified as to their admission status in a creative writing course after the instructor has reviewed the submitted writing portfolio.

### 7.5.4 Declaring the Diploma in Creative Writing

Students wishing to declare a Diploma in Creative Writing are encouraged to consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 7.5.5 Program of Study

Students are required to complete a minimum of 24 credit hours of course work from Table 1 Courses Approved for the Diploma in Creative Writing.

Table 1: Courses Approved for the Diploma in Creative Writing
English 2905, 3900, 3901, 3902, 3903, 3904, 4910, 4911, 4912, 4913
With written approval of the Program Coordinator and the Faculty's Undergraduate Waivers and Appeals Committee, select other courses may be eligible towards the Diploma credit requirements. This includes special topics courses in creative writing that are offered from time to time, English 4999 when it is completed as a creative writing project, and select courses offered at Grenfell Campus and other institutions.

### 7.6 Diploma in Environmental Humanities

www.mun.ca/hss/programs/undergraduate/diplomas/environmental_humanities.php www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Environmental Humanities is administered by the Department of History.
The Diploma in Environmental Humanities fosters an interdisciplinary approach to the study of the environment. The program draws primarily on scholarship in the humanities, as well as cognate material from the social sciences, to bring cultural, literary-critical, historical, philosophical, and qualitative analyses to bear on environmental issues, on the conceptualization of nature, and on the relationship of the human to the non-human. Complementing the contributions to ecology from the quantitative sciences, the diploma engages with fundamental questions of meaning, value, responsibility, and purpose in response to local and global environmental issues.

### 7.6.1 Advising

Throughout their program of study, students shall contact an academic advisor or the Coordinator of the Diploma in Environmental Humanities for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.6.2 Declaring the Diploma in Environmental Humanities

Students wishing to declare a Diploma in Environmental Humanities shall consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 7.6.3 Regulations for the Diploma in Environmental Humanities

Students are required to complete a minimum of 27 credit hours in eligible courses offered by the Faculty of Humanities and Social Sciences, selected from Table 1 Approved Courses for the Diploma in Environmental Humanities, of which no more than 15 credit hours may be in a single discipline, as follows:

1. 3 credit hours in Geography 1050;
2. 21 credit hours chosen from Table 1 Approved Courses for the Diploma in Environmental Humanities; and
3. 3 credit hours chosen from Geography 4500 or History 4500, History 4125 or Sociology 4104.

## Table 1 Approved Courses for the Diploma in Environmental Humanities

| Required Courses | Other Approved Courses |
| :--- | :--- |
| Geography 1050 <br> At least one of Geography 4500 or History 4500, History 4125, <br> Sociology 4104 | Anthropology 3050, 3083, 3280, 3452, 4450 <br> Classics 2902 <br> Communication Studies 4002 <br> English 3009 <br> Geography 2001, 2425, 3610 <br> History 3030, 4011, 4125, 4220, 4252 <br> Philosophy 2130 or the former 2561 <br> Religion 3880 <br> Russian 3440 <br> Sociology 2290 |

Given the wide variety of course options, a student may elect to follow a variety of pathways. One possible pathway of course sequencing is presented in Table 2 Suggested Course Sequencing for the Diploma in Environmental Humanities.

Table 2 Suggested Course Sequencing for the Diploma in Environmental Humanities
First 3 credit hours: Geography 1050
Next 21 credit hours: Courses selected from Table 1 Approved Courses for the Diploma in Environmental Humanities
Final 3 credit hours: Geography 4500 or History 4500, History 4125, Sociology 4104

### 7.6.4 Honours Essay Courses

A student may apply to the Committee on Undergraduate Studies to have a maximum of 3 credit hours from an Honours essay course applied to the Diploma in Environmental Humanities. It must be clearly demonstrated that the entirety of the Honours essay course content is relevant to the program. This may not be used to substitute credit hours in an anchor or core course.

### 7.6.5 Course Prerequisites

Many approved courses are suitable for students in all disciplines without a background in the discipline. Other approved courses may have prerequisites.

### 7.6.6 Graduation Requirements

1. To be eligible for the award of a diploma, a student must have obtained an overall average of $60 \%$ or higher in the courses prescribed for that program.
2. A minimum of 9 credit hours in courses prescribed for the diploma program must be completed at this University.
3. Students must apply to graduate by the appropriate deadline through the Memorial Self-Service under the Graduation section. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.
4. A student may not be awarded both the Diploma in Environmental Humanities and the Diploma in Humanities.

### 7.7 Diploma in Geographic Information Sciences

www.mun.ca/geog/programs/undergraduate/GISciences
www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Geographic Information Sciences is administered by the Department of Geography.
The Diploma in Geographic Information Sciences is of interest to students from a broad range of backgrounds. It is a valuable complement to social and natural sciences programs such as anthropology, biology, computer sciences, earth sciences, history, economics, engineering, health and medicine, physical oceanography, environmental sciences, and environmental studies. The fields of remote sensing, geographic information systems (GIS), and cartography provide the most effective methods of gathering, managing, analyzing, and representing geographic information. Remote sensing images provide resourceful information to observe and study cultural and physical landscapes. Examples of remote sensing applications include the monitoring of spatial changes, environmental quality evaluation, natural resource exploration, assessment and monitoring, and archaeological site assessment. Geographic information systems enable the compilation, organization, and processing of spatial (maps) and nonspatial (text statistics, graphs) data. Socio-economic, political, and environmental management decision-making is supported by the results of GIS analyses and modeling. Cartography involves the compilation, organization, and visual representation of spatial information. A variety of geographical information can effectively be communicated through cartography.

### 7.7.1 Faculty of Humanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.7.2 Advising

Throughout their program of study, students shall contact an academic advisor or the Coordinator of the Diploma in Geographic Information Sciences for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.7.3 Declaring the Diploma in Geographic Information Science

Students wishing to declare a Diploma in Geographic Information Sciences shall consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 7.7.4 Admission Requirements

Admission to the Diploma is Geographical Information Sciences is limited and competitive. Students who wish to enter this program must apply through the Office of the Registrar by April 1 for Fall semester registration and by October 15 for Winter semester registration. The formal application is available at www.mun.ca/hss/programs/undergraduate/diplomas/ or from the Office of the Registrar.
To be considered for admission to the Diploma in Geographic Information Sciences, students will normally have completed 24 credit hours, including the courses listed below, with an overall average of at least $65 \%$.

1. Geography 1050 or one 1000 -level course in applicant's Bachelor's Major program.
2. Mathematics 1000 or equivalent.
3. Two 1000-or 2000-level core courses in student's Bachelor's Major program, excluding the courses listed above.

Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance.

### 7.7.5 Program of Study

Students are required to complete a minimum of 30 credit hours of courses as listed below under Table 1 Course Requirements for the Diploma in Geographic Information. All students for the Diploma in Geographical Information Sciences must complete the Field Placement course Geography 4290 and the capstone course Geography 4919.

Table 1 Course Requirements for the Diploma in Geographic Information Sciences

| $\mathbf{1 0 0 0}$ and 2000-Level Courses | 2000-Level Courses | 4000-Level Courses |
| :--- | :--- | :--- |
| Computer Science 1001 <br> Geography 2195 | Geography 3202 <br> Geography 3250 <br> Geography 3260 | Geography 4202 <br> Geography 4250 <br> Geography 4261 <br> Geography 4290 <br> Geography 4919 |

### 7.7.6 Continuation Requirements

To be considered for Geography 4290 and 4919 , the students for the Diploma in Geographic Information Sciences will normally have completed at least 21 credit hours required for the program, with an overall average of $65 \%$.

### 7.8 Diploma in Humanities

www.mun.ca/hss/humanities
www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Humanities is administered by the Department of Philosophy.
The Diploma in Humanities provides a foundation in the study of liberal arts. Students are exposed to the foundational disciplines of Classics and Philosophy and other areas of the humanities that explore how great thinkers have interpreted our world, and take courses in a language other than English in which many of these thinkers originally wrote. The program takes a holistic approach to the study of the humanities by emphasizing subject areas rather than specific courses in order to be accessible to a wide audience. Students are encouraged to select from a wide variety of humanities courses in the Faculty of Humanities and Social Sciences that align with their interests and which fit their schedule.

### 7.8.1 Faculty of Humanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.8.2 Advising

7.7.2 Advising Throughout their program of study, students shall contact an academic advisor or the Coordinator of the Diploma in Humanities for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.8.3 Admission Requirements

To be considered for admission to the Diploma in Humanities, students will have completed 6 credit hours in designated Critical Reading and Writing (CRW) courses in eligible humanities disciplines, including at least 3 credit hours in Department of English CRW courses. Eligible credit hours in CRW courses required for program admission will be applied towards the Diploma requirements.

### 7.8.4 Declaring the Diploma in Humanities

Students wishing to declare a Diploma in Humanities shall consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/ hss/programs/undergraduate/ideclare.php.

### 7.8.5 Regulations for the Diploma in Humanities

Students are required to complete a minimum of 36 credit hours in eligible courses selected from Table 1 Required and Elective Courses for the Diploma in Humanities as follows:

1. a minimum of 12 credit hours at the 3000 -level or above, of which at least 3 credit hours must be at the 4000 -level;
2. a maximum of 18 credit hours in any one discipline;
3. 6 credit hours in designated Critical Reading and Writing (CRW) courses, chosen from areas of study listed in Table 1 Required and Elective Courses for the Diploma in Humanities, including at least 3 credit hours in a CRW course offered by English. Refer to Bachelor of Arts General Degree Components, Core Requirements, Critical Reading and Writing (CRW) Requirement;
4. 6 credit hours in designated Language Study (LS) courses delivered in the same language of instruction chosen from languages listed in Bachelor of Arts General Degree Components, Core Requirements, Language Study (LS) Requirement;
5. 6 credit hours, in Greek studies and/or Roman studies courses offered by Classics (excluding designated Language Studies courses):
6. 6 credit hours in Philosophy (excluding Philosophy 2030, 2031 (or the former 2210, 2211); and,
7. 12 additional credit hours chosen from:
a. any of the specified areas of study above, which may include a maximum of 6 additional credit hours in Language Study courses; and/or
b. up to 9 credit hours in non-Language Study courses in French, German, Russian, Spanish; and/or
c. up to 9 credit hours in any one of Communication Studies, English, Gender Studies, History, Medieval Studies, Political Science political theory, Religious Studies. Quantitative Reasoning (QR) courses are not eligible towards the Diploma in Humanities.

Table 1 Required and Elective Courses for the Diploma in Humanities

| Required Courses | Elective Courses |
| :--- | :--- |
| Critical Reading and Writing (CRW) courses in areas of study | Non-Language Study courses in French, German, Russian, |
| listed in Table 1 Required and Elective Courses for the | Spanish <br> Diploma in Humanities, Required Courses or Elective <br> Communication Studies courses <br> Courses |
| English courses <br> Language Study (LS) courses <br> Classics courses in Greek studies and/or Roman studies <br> Philosophy courses (excluding Philosophy 2030, 2031 (or the <br> former 2210, 2211) | History courses courses <br> Medieval Studies courses <br> Political Science courses in political theory (second digit in <br> course number is "1") |
|  | Religious Studies courses |

Given the wide variety of course options, a student may elect to follow a variety of pathways. One possible pathway of course
sequencing is presented in Table 2 Suggested Course Sequencing for the Diploma in Humanities.
Table 2 Suggested Course Sequencing for the Diploma in Humanities
First 6 credit hours: One Critical Reading and Writing (CRW) course in English, and one CRW course in another discipline listed in Table 1 Required and Elective Courses for the Diploma in Humanities

Next 6 credit hours: Two Language Study (LS) courses in the same language
Next 12 credit hours: Complete Classics and Philosophy requirement
Final 12 credit hours: Choice of four additional courses from Table 1 Required and Elective Courses for the Diploma in Humanities, including at least three courses at the 3000 -level and one course at the 4000 -level. A student is encouraged to select courses that align with classical humanities and theory, while being mindful of the limit of 18 credit hours in any one discipline.

### 7.8.6 Other Eligible Courses

Courses whose calendar title and description clearly aligns with the Diploma in Humanities requirements may be deemed eligible towards the program with the prior written permission of the Faculty's Undergraduate Waivers and Appeals Committee and the Program Coordinator. This includes up to 9 elective credit hours in cultural studies humanities courses offered by related disciplines in the Faculty of Humanities and Social Sciences; up to 18 credit hours in Humanities courses offered at Grenfell Campus; and of up to 9 credit hours in Social/Cultural Studies courses offered at Grenfell Campus. Quantitative Reasoning (QR) courses are not eligible.

### 7.8.7 Course Prerequisites

Normal course prerequisites apply. Students must plan their program of study accordingly in order to fulfill all requirements.

### 7.8.8 Preparation for a Bachelor of Arts

All credit hours used towards the Diploma in Humanities may also be eligible for application to a Bachelor of Arts, including the Critical Reading and Writing (CRW) and Language Study (LS) aspects of the Bachelor of Arts Core Requirements.

### 7.8.9 Graduation Requirements

1. As per Diploma Programs Offered in the Faculty of Humanities and Social Sciences, Graduation Requirements, to be eligible for the award of a Diploma in Humanities, a student must obtain an overall average of $60 \%$ or higher in the courses prescribed for the program. A minimum of 9 credit hours in courses prescribed for the diploma program must be completed at this University.
2. A student may not be awarded both the Diploma in Environmental Humanities and the Diploma in Humanities.

### 7.9 Diploma in Police Studies

www.mun.ca/plst
www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Police Studies is administered by the Department of Sociology.
The Police Studies Diploma is intended for students with an interest in policing or criminal justice. Police studies may be a valuable complement to students in a variety of programs including sociology, geography, political science, anthropology, psychology, and business. Students who have undergraduate degrees may be interested in the diploma as a mean of specializing or expanding their knowledge in the policing area. For students interested specifically in careers with the Royal Newfoundland Constabulary (RNC) in Newfoundland and Labrador, the RNC accepts the Diploma as fulfilling the post-secondary educational qualification for admission to their police cadet program.
Police Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Sociology, Police Studies and are designated as PLST.

### 7.9.1 Faculty of Humanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.9.2 Advising

Throughout their program of study students shall contact an academic advisor or the Coordinator of the Diploma in Police Studies for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.9.3 Admission Requirements

Students cannot self-declare this program. Students wishing to complete the Diploma in Police Studies should consult with the Police Studies Coordinator. Information about diploma programs offered by the Faculty is available at www.mun.ca/hss/programs/ undergraduate/diplomas/.
Admission to the Diploma program is limited and competitive. Students who wish to enter this program must apply through the Office of the Registrar by April 1 for Fall semester registration and by October 15 for Winter semester registration. The formal application is available at www.mun.ca/hss/programs/undergraduate/diplomas/ or from the Office of the Registrar. In addition, at the time of admission, applicants must have completed either a university degree in any discipline from a recognized university, or have completed at a post-secondary institution, the equivalent of 15 credit hours, which should include Sociology 1000 (or the former 2000), Law and Society 1000, Police Studies 2300 or Sociology 2300, and two CRW and/or English courses. It is recommended that students select from a list of four CRW courses: (Gender Studies 1005 or the former 2005, Philosophy 1011 or the former 1230, Archaeology 1005 or History 1005, and Political Science 1001) but other CRW courses and/or English courses with reading and writing emphases will be accepted.

### 7.9.4 Program of Study

1. With approval from the appropriate department(s), candidates may be deemed to have met some or all of the program prerequisites. In these situations, prerequisite waivers must be approved prior to a student's enrollment in the Diploma in Police Studies program. Any such prerequisite waiver will only be applicable to the Diploma in Police Studies program. Waiver approvals are not an indication of approval for transfer credit. A student may apply for transfer credit through the Office of the Registrar.
2. Students are required to complete 30 credit hours of courses as listed below under Table 1 Course Requirements for the Diploma in Police Studies. By virtue of admission to the program with prior university experience, students are expected to be prepared to complete courses in Police Studies, Political Science, Psychology, and Sociology at the 2000-level and higher. A student who completed a Table 1 course prior to admission to the Diploma in Police Studies and obtained a final grade lower than $B$ is strongly encouraged to retake that course.
3. The Diploma in Police Studies consists of 30 credit hours chosen from Table 1 Course Requirements for the Diploma in Police Studies as follows:
a. 18 credit hours in Police Studies 1000 (or the former Police Studies 2000), 2200, 3000, 3100, 3500 and one of 4000, 4001, 4212 (or Sociology 4212);
b. 6 credit hours in two of Sociology 3290, Police Studies 3306 (or Sociology 3306), Police Studies 3395 (or Sociology 3395);
c. 3 credit hours in Psychology 2150 or Archaeology 2492; and
d. Political Science 3620.

A student is expected to enroll in the Police Studies section of any applicable crosslisted courses.
Table 1 Course Requirements for the Diploma in Police Studies

| $\mathbf{1 0 0 0}$ and 2000-Level Courses | 3000-Level Courses | 4000-Level Courses |
| :--- | :--- | :--- |
| Police Studies 1000 (or the former | Police Studies 3000 |  |
| Police Studies 2000) | Police Studies 3100 | One of Police Studies 4000, 4001, |
| Police Studies 2200 | Police Studies 3500 |  |
| Psychology 2150 or Archaeology |  |  |
| 2492 | Political Science 3620 |  |
| Two of Sociology 3290, Police Studies 3306 or |  |  |
| Sociology 3306 or Police Studies 3395 or Sociology |  |  |
|  | 3395 |  |

Eligible credit hours completed as part of the Diploma in Police Studies program may be used towards other Humanities and Social Sciences programs, including the Major in Police Studies, provided that they are in accordance with the regulations governing the program.

### 7.9.5 Graduation Requirements

To be eligible for awarding of the Diploma in Police Studies students must meet the graduation requirements as outlined in Diploma Programs Offered in the Faculty of Humanities and Social Sciences, Graduation Requirements.

### 7.10 Diploma in Stage and Screen Technique

www.mun.ca/english/programs/diplomas www.mun.ca/hss/about/contact/coordinators.php
The Diploma in Stage and Screen Technique is administered by the Department of English.
The Diploma in Stage and Screen Technique is a stand-alone diploma which may be completed concurrently with a degree program. It combines hands-on courses in film, video, and theatre production to prepare students to work in the cultural industries, or for further study in these fields. Students will cover a broad number of production areas, including directing, producing, acting, and many backstage and behind-the-scenes roles. Courses result in production of digital videos and films, and in staged performances.
All credit hours used towards the Diploma in Stage and Screen Technique may also be eligible for application to a Bachelor of Arts.

### 7.10.1 Faculty of Hûmanities and Social Sciences Diploma Regulations

Students intending to complete a diploma program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Diploma Programs and Graduation Requirements.

### 7.10.2 Advising

Throughout their program of study, students shall contact an academic advisor or the Coordinator of the Diploma in Stage and Screen Technique for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 7.10.3 Admission Requirements

To be considered for admission to the Diploma in Stage and Screen Technique, students must have completed English 2451 (or the former English 3351) and earned a minimum of $75 \%$ in that course.
Students wishing to declare the Diploma in Stage and Screen Technique shall consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 7.10.4 Regulations for the Diploma in Stage and Screen Technique

Students are required to complete 24 credit hours from a series of prescribed courses. The 24 credit hours shall include:

1. 9 credit hours in English 2450, 2451, and 4401;
2. 9 credit hours in English 4400, 5000, Communication Studies 3816 and 4402;
3. 3 credit hours in a Creative Writing course chosen from English 3902, English 3912, English 3913 or Communication Studies 3913,

English 3920, English 4912 or a Podcasting course; and
4. 3 credit hours chosen from Table 1 Faculty of Humanities and Social Sciences Courses for the Certificate in Film Studies.

### 7.10.5 Attendance Regulation

Attendance is mandatory in the following courses: English 2450, 2451, 4400, 4401, and 5000 and Communication 3816 and 4402. Students may miss a maximum of two classes per course per semester. Students may fail or be deregistered from the course if they exceed this number of missed classes, for any reason, and/or if they consistently miss class time due to late arrivals or early departures. Attendance is necessary for safety reasons, as these are practical courses where students are working with equipment and in situations where they will be at risk without proper training. In addition, the majority of the assignments are based on group work, which cannot be carried out when students are absent from class.

### 7.10.6 Graduation Requirements and Applying for Graduation

As per Diploma Programs, Graduation Requirements, to be eligible for the award of a Diploma in Stage and Screen Technique, a student must obtain an overall average of $60 \%$ or higher in the courses prescribed for the program. A minimum of 12 credit hours in courses prescribed for the diploma program must be completed at this University.
In the final semester of either their degree and/or the Diploma in Stage and Screen Technique, students must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation " form. This form may be obtained on-line at the Memorial SelfService at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

### 7.10.7 The Former Diploma in Performance and Communications Media

Students cannot receive both a Diploma in Performance and Communications Media and a Diploma in Stage and Screen Technique. Students currently enrolled in the former Diploma in Performance and Communications Media may choose to transfer to the Diploma in Stage and Screen Technique, but must complete all the required courses of either one or the other. There will be no mixing of the programs. Since all courses required for the former Diploma in Performance and Communications Media will continue to be offered, there is no need for a grandparenting clause.

## 8 Certificate Programs

www.mun.ca/hss/programs/undergraduate/certificates
A certificate program in the Faculty of Humanities and Social Sciences offers a flexible option for students seeking to develop specialized knowledge and competencies. It provides a starting point for university studies or acts as an adjunct to an undergraduate degree. It is not designed to satisfy specific employment credentials. It is sufficiently specialized to ensure its academic integrity and normally features at least one required anchor course that is taken at the beginning of the program. Whereas diploma programs are designed as advanced level of study, certificate programs introduce students to a focused subject area, placing greater emphasis on foundation-level knowledge.
The Faculty of Humanities and Social Sciences offers the following certificate programs:

1. Certificate in Ancient Languages
2. Certificate in Criminology
3. Certificate in Film Studies
4. Certificate in Food Studies
5. Certificate in Indigenous-Aboriginal Studies
6. Certificate in Newfoundland and Labrador Studies
7. Certificate in Public Policy

### 8.1 General Regulations for Certificate Programs

1. A certificate program is administered by a Program Coordinator. The Coordinator is normally affiliated with the Faculty of Humanities and Social Sciences department that is primarily responsible for the Program's administration.
2. Certificate programs consist of between 18 and 21 credit hours in courses as specified in individual programs. No more than 6 credit hours at the 4000 -level shall be required. Additional 4000 -level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs. Pre-requisites may apply.
3. Subject to limitations outlined in Limit on Certain Credit Hours, courses satisfying the Honours, Major, Minor and elective components of an undergraduate degree may also be used to satisfy the requirements of a certificate program. Departmental prerequisites for courses are applicable. This may increase the number of stated courses required for completion of the certificate program. Such courses may be eligible towards other components of the Bachelor of Arts.
4. Normal credit restrictions apply. It is the student's responsibility to recognize that additional credit may not be obtained for completing two versions of a cross-listed course (i.e., the same course listed under two or more departments).
5. A Program Coordinator may, in consultation with the Head of the relevant academic unit, request permission from the Faculty's Undergraduate Waivers and Appeals Committee for a course to be added to the certificate program.
6. Due to their temporary nature, "special topics" courses are not listed in the entries for a certificate program. However, a special topics course may be included in a student's program of study with permission from the Faculty's Undergraduate Waivers and Appeals Committee.
7. A student who completes courses at another university in the area of a Certificate offered by the Faculty of Humanities and Social Sciences may be eligible to transfer some of those credits to fulfill requirements in the Major at Memorial University of Newfoundland. For further information refer to Limited Enrolment Courses and Transfer Credits, Requirement for Courses Delivered at Memorial University of Newfoundland.

### 8.2 Admission

1. Students seeking information about a certificate program should contact the coordinator of the certificate program, the Office of the Dean of Humanities and Social Sciences, or the Office of the Registrar.
2. A certificate program is open to all students who are granted admission to the University. The application for admission or
readmission is submitted online; current and returning Faculty of Humanities and Social Sciences applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. A complete application package includes an application to the University and any other required documentation (for those who have not attended Memorial University of Newfoundland in the three preceding semesters). Details are available under UNIVERSITY REGULATIONS - Admission/Readmission to the University Undergraduate.

### 8.3 Components

1. A student must follow the regulations for the certificate program as set forth in the appropriate section of the Calendar.
2. A certificate program in the Faculty of Humanities and Social Sciences consists of between 18 and 21 credit hours in courses as specified by the program. This normally includes a selection of core courses that has been deemed fundamental to the program and a requirement for courses from a minimum of two disciplines. The majority of credit hours in a Faculty of Humanities and Social Sciences certificate must be comprised of courses listed in the Faculty of Humanities and Social Sciences Course Descriptions.
3. Courses offered by the Faculty of Humanities and Social Sciences satisfying another University program may also be used to satisfy the requirements of a Faculty of Humanities and Social Sciences certificate program, subject to both programs' regulations.
4. A student may apply to the Faculty's Undergraduate Waivers and Appeals Committee to have a maximum of 3 credit hours from an Honours essay course applied to a certificate program. It must be clearly demonstrated that the entirety of the Honours essay course content is relevant to the program. This may not be used to substitute credit hours in an anchor or core course.

### 8.4 Graduation Requirements

1. To be eligible for the award of a certificate offered by the Faculty of Humanities and Social Sciences, a student must have obtained an overall average of $60 \%$ or higher in the courses prescribed for that program.
2. As per Limited Enrolment Courses and Transfer Credits, Requirements for Courses Delivered by Memorial University of Newfoundland a minimum of 9 credit hours in courses prescribed for the certificate program must be completed at this University.
3. A student who has completed a certificate program and wishes to complete a second certificate offered by the Faculty of Humanities and Social Sciences must:
a. comply with all course requirements governing the award of that certificate; and
b. complete at least 9 credit hours beyond those used for the first certificate. The courses which comprise these credit hours must be applicable to the certificate sought.

### 8.5 Certificate in Ancient Languages

www.mun.ca/hss/ancientlanguages
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Ancient Languages is administered by the Department of Classics.
The Certificate in Ancient Languages is designed to appeal to students interested in the study of ancient languages and who wish to gain an appreciation for the origin of many modern languages. Ancient languages are languages which are no longer spoken as the first language of any living person, although they may have direct descendants in current use. They remain culturally significant as languages of religion, scholarship and literature. The Certificate also offers specialized, high-quality preparation for students interested in studying subjects such as Archaeology, Classics, History, Linguistics, Philosophy, and Religion. The Certificate will also appeal to students studying in the areas of Medicine and Law, providing them with the etymological roots of subject-specific terminology.

### 8.5.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.5.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Ancient Languages for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.5.3 Declaring the Certificate in Ancient Languages

Students interested in a Certificate in Ancient Languages are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the certificate can declare a Certificate in Ancient Languages by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.5.4 Regulations for the Certificate in Ancient Languages

The Certificate in Ancient Languages consists of 21 credit hours as prescribed below:

1. 3 credits hours in Linguistics chosen from a list of approved courses as outlined under Table 1 Approved Courses for the Certificate in Ancient Languages, Foundational Required Courses; and,
2. 18 credit hours chosen from specified courses in Ancient Greek, Biblical Hebrew, Latin, Sanskrit, Old English and Middle High German as outlined under Table 1 Approved Courses for the Certificate in Ancient Languages, Approved Ancient Languages Courses, consisting of:
a. a minimum of 6 credit hours in one ancient language;
b. a minimum of 6 credit hours in another ancient language;
c. a minimum of 3 credit hours in a third ancient language; and
d. a further 3 credit hours in any Table 1 Approved Courses for the Certificate in Ancient Languages, Approved Ancient Languages Course.

When planning their program of study, students should consider that languages other than Greek and Latin are not regularly available. Therefore, students are strongly advised to consult with the Program Coordinator for assistance with course planning.

Table 1 Approved Courses for the Certificate in Ancient Languages

| Foundational Required Courses | Approved Ancient Languages Courses |
| :--- | :--- |
| Linguistics 1105 | Classics 1120, 1121, 1130, 1131, 2200, 2300, 2302 |
| Linguistics 1155 | English 3500, 4500 |
|  | German 4300, 4301 |
|  | Religious Studies 1050, 1051, 1060, 1061 |

Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.

### 8.5.5 Course Prerequisites

Due to the sequenced nature of language courses, all language courses beyond the introductory level have prerequisites.

### 8.6 Certificate in Criminology

www.mun.ca/hss/criminology
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Criminology is administered by the Department of Sociology.
The Certificate in Criminology is designed for those who are interested in the study of criminality, crime, deviance, and the correctional systems more broadly. Program participants will be introduced to the foundational knowledge related to the Canadian legal system, law, justice and correctional systems, with a provincial and federal focus. They will gain a more complex understanding of the social structures and practices of criminal justice as well as what constitutes positive practice for persons working in corrections or criminal justice more generally. Students will be introduced to the theoretical, legal, methodological, practical, and ethical debates in criminology, which will allow participants to more effectively analyze and understand their work in law enforcement, corrections and rehabilitation. The program will be of particular interest to persons engaged in law enforcement, corrections, social work, and rehabilitation, as well as persons studying society, and individuals seeking work in not-for-profit and charitable organizations that foster positive social growth.

### 8.6.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.6.2 Advising

Throughout their program of study, students shall contact an academic advisor for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.6.3 Declaring the Certificate in Criminology

Students interested in a Certificate in Criminology are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the certificate can declare a Certificate in Criminology by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.6.4 Regulations for the Certificate in Criminology

The Certificate in Criminology consists of 21 credit hours as prescribed below. Six credit hours must be at the 3000 -level or higher.

1. 12 credit hours in Sociology 1000, Sociology 2300 or Police Studies 2300, Sociology 3290; and Sociology 3395 or Police Studies 3395;
2. 3 credit hours in either Law and Society 1000 or Lâw and Society 2000; and
3. 6 additional credit hours chosen from Table 1 Elective Courses for the Certificate in Criminology, of which 3 credit hours must be from Law and Society, Political Science, or Psychology.
Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning.
Students are advised to generally follow the suggested course sequencing presented in Table 2 Suggested Course Sequencing for the Certificate in Criminology.

Table 1 Elective Courses for the Certificate in Criminology
Police Studies 1000 or the former 2000, 2200, 3100
Political Science 3620, 3820
Psychology 2150, 2800, one of 3640 or 3650
Sociology 3306 or Police Studies 3306, Sociology 4080, 4099, 4212 or Police Studies 4212

Table 2 Suggested Course Sequencing for the Certificate in Criminology
First 6 credit hours: Law and Society 1000, Sociology 1000
Next 9 credit hours: Sociology 2300 or Police Studies 2300, Sociology 3290, Sociology 3395 or Police Studies 3395
Final 6 credit hours: two additional approved courses, one of which must be from Law and Society, Political Science or Psychology
Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.

### 8.6.5 Approved Course Substitutions for the Certificate in Criminology

1. Psychology 3626 (Grenfell) may be substituted for Psychology 3640 or 3650.
2. Any one of Psychology 2910, 2911, 2920, or 2925 (Grenfell) or Sociology 3040 or 3041 may be substituted for Sociology 2300.

### 8.6.6 Course Prerequisites

Normal course prerequisites will apply. Students should note that Psychology 1000 and 1001 are prerequisites (in addition to the 21 credit hours specified for the certificate) for Psychology 2920. As well, as 6 credit hours in Sociology is the prerequisite for Sociology 4080, and Sociology 3040 and 3150 are prerequisites for Sociology 4099, enrollment priority will be given to students who have declared a Sociology Major and / or Criminology certificate.

### 8.6.7 Regulations Concerning the Former Lifelong Learning Certificate in Criminology

A Humanities and Social Sciences Certificate in Criminology cannot be awarded to those who have already been awarded a Certificate in Criminology through the former Division of Lifelong Learning.

### 8.7 Certificate in Film Studies

www.mun.ca/hss/fmst
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Film Studies is administered by the Department of English.
The Certificate in Film Studies is designed for those who are interested in film as a form of cultural production that spans the globe. The program acquaints students with film as form before exploring how it is deployed in multiple settings and how it evolves depending on political, social, historical, economic, and technological contexts.

### 8.7.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.7.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Film Studies for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.7.3 Declaring the Certificate in Film Studies

Students interested in a Certificate in Film Studies are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the Certificate can declare a Certificate in Film Studies by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.7.4 Regulations for the Certificate in Film Studies

As part of the Certificate in Film Studies students must complete a communications theory course and a film theory course, supplemented by courses analyzing film in specific contexts. Students are encouraged to take foundation courses before proceeding with the other requirements for the Certificate.
The Certificate in Film Studies consists of 21 credit hours as prescribed below:

1. 3 credit hours in Communication Studies 2001 or English 2813;
2. 3 credit hours in English 2850 or 2851; and
3. a minimum of 15 additional credit hours selected from Table 1 Faculty of Humanities and Social Sciences Courses for the Certificate in Film Studies, of which there shall be a minimum of 3 credit hours at the 3000 -level.

Table 1 Faculty of Humanities and Social Sciences Courses for the Certificate in Film Studies

| Foundation Theory Courses | 1000-level and 2000-level Film Studies <br> Courses | 3000-level Film Studies Courses |
| :--- | :--- | :--- |
| Communication Studies 2001 | Archaeology 2493 <br> English 2813 or Communications Studies <br> Philosophy 2340 or the former Philosophy <br> 2813 <br> English 2850, 285 | Anthropology 3404 <br> Religious Studies 2022 or the former 1022 <br> Classics 3700 <br> English 3813 <br> English 3828 or Medieval Studies 3828 <br> French 3506 <br> German 3000, 3001, 3002, 3003 <br> History 3790, 3795 3 |
| Russian 3003, 3023 |  |  |
| Spanish 3300 |  |  |

Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.

### 8.7.5 Course Prerequisites

Many approved courses are suitable for students in all disciplines without a background in the discipline. Other approved courses may have prerequisites.

### 8.7.6 Regulations Concerning the Former Minor in Film Studies

The Certificate in Film Studies cannot be awarded to those who have already been awarded a Minor in Film Studies.

### 8.8 Certificate in Food Studies

www.mun.ca/hss/fdst
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Food Studies is administered by the Department of Anthropology.
The Certificate in Food studies involves the interdisciplinary study of food issues at local, regional, national and global scales. The objective of the program is to provide foundational knowledge about the various dimensions of food systems and about the barriers to local and global food security.

### 8.8.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission * requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.8.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Food Studies for assistance with course planning, declaring their program of study, registration Issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.8.3 Declaring the Certificate in Food Studies

Students interested in a Certificate in Food Studies are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the Certificate can declare a Certificate in Food Studies by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.8.4 Regulations for the Certificate in Food Studies

The Certificate in Food Studies consists of 21 credit hours as prescribed below:

1. 9 credit hours chosen from Anthropology 2415, Folklore 3830, Geography 3420, Political Science 3260; and
2. 12 additional credit hours chosen from Table 1 Approved Courses for the Certificate in Food Studies.

In accordance with Certificate Programs, Components, a minimum of 12 credit hours in the Certificate in Food Studies must be must be comprised of courses listed in the Faculty of Humanities and Social Sciences Course Descriptions.

Table 1 Approved Courses for the Certificate in Food Studies

| Core Courses | Other Humanities and Social <br> Sciences Courses | Other Approved Courses |
| :--- | :--- | :--- |
| Anthropology 2415 | Anthropology 3411, 3452 <br> Folklore 3830 <br> Geography 3420 <br> Political Science 3260 | Folklore 2800 3510 <br> Sociology 2290 |

Eligible 4000-level credit hours may be substituted foilowing the process outlined in General Regulations for Certificate Programs.
Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning.

### 8.9 Certificate in Indigenous - Aboriginal Studies

www.mun.ca/hss/abst
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Indigenous - Aboriginal Studies is administered by the Department of Archaeology.
The Certificate in Indigenous Aboriginal Studies is designed for those interested in learning about the history, cultures, languages, beliefs, and experiences of Indigenous peoples.
The objective of the program is to provide foundational knowledge for understanding historical and contemporary experiences of Indigenous peoples - from the origins of first peoples and complex histories over the proceeding millennia, to present movements and the growing desire for reconciliation between governments and Indigenous societies.
The area of Indigenous studies is an increasingly important field in Canada, and the world. This program will benefit a wide variety of learners, including current and prospective university students, and individuals interested in a career in the public, not-for-profit, and nongovernmental sectors.

### 8.9.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.9.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Indigenous - Aboriginal Studies for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.9.3 Declaring the Certificate in Indigenous - Aboriginal Studies

Students interested in a Certificate in Indigenous - Aboriginal Studies are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the Certificate can declare a Certificate in Indigenous - Aboriginal Studies by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.9.4 Regulations for the Certificate in Indigenous - Aboriginal Studies

As part of the Certificate in Indigenous - Aboriginal Studies students must complete a 3 credit hour foundation course at the 1000-level. It is anticipated that the foundation course will be taken at the beginning of the program. As part of their course selections, students will also complete at least two courses that emphasizes the origins and histories of Indigenous peoples ("past"), and at least two courses that emphasizes contemporary issues of Indigenous peoples ("present").
The Certificate in Indigenous - Aboriginal Studies consists of 21 credit hours as prescribed below:

1. Archaeology 1005 or History 1005; and
2. 18 credit hours chosen from Table 1 Courses for the Certificate in Indigenous - Aboriginal Studies, including a minimum of 3 credit hours from the "Past" column and a minimum of 3 credit hours from the "Present" column; and

Table 1 Courses for the Certificate in Indigenous - Aboriginal Studies

| Theory Courses | "Past" Courses | "Present" Courses |
| :--- | :--- | :--- |
| Archaeology 1005 or History 1005 | Archaeology 2481, 3290, 3291, 3510, | Anthropology 2414, 3070, 3240 |
|  | 3588, 3590 <br> Archaeology/History 3520, 3525 <br> History 2800, 3765 | Archaeology 2482 <br> English 2160 |
|  |  | Gender Studies 3015 |
|  |  | Law and Society 3012, 3014 |
|  |  | Linguistics 2060 |
| Political Science 3830 |  |  |

Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning, and to generally follow Table 2 Suggested Course Sequencing for the Certificate in Indigenous - Aboriginal Studies.
When the opportunity is available for students to take appropriate Language Study courses in the Department of Linguistics, the Program Coordinator may seek written permission from the Faculty's Undergraduate Waivers and Appeals Committee to include up to 6 credit hours in the program. Other Humanities and Social Sciences courses whose Calendar entry clearly establishes an emphasis on Indigenous Studies, including courses delivered exclusively at Grenfell Campus or the Labrador Institute, may be eligible. Students should speak with the Program Coordinator for information.
Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.
Table 2 Suggested Course Sequencing for the Certificate in Indigenous - Aboriginal Studies
First 3 credit hours: Archaeology 1005 or History 1005
Next 18 credit hours: Complete an additional six courses selected from Table 1 Courses for the Certificate in Indigenous -
Aboriginal Studies, including at least two "Past" courses and at least two "Present" courses (Certificate total is 7 courses)

### 8.9.5 Course Prerequisites

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Many approved courses are suitable for students in all disciplines without a background in the discipline. Other approved courses may have prerequisites.

### 8.9.6 Regulation Concerning the Former Minor in Aboriginal Studies

A student who is enrolled in, or who has completed the former Minor in Aboriginal Studies, is not eligible to enroll in the Certificate in Indigenous-Aboriginal Studies.

### 8.9.7 Regulation Concerning the Former Certificate in Aboriginal and Indigenous Studies

A student may not receive both the Certificate in Indigenous - Aboriginal Studies and the former Certificate in Aboriginal and Indigenous Studies.

### 8.10 Certificate in Newfoundland and Labrador Studies

www.mun.ca/hss/nlst
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Newfoundland and Labrador Studies is administered by the Department of Folklore.
The Certificate in Newfoundland and Labrador Studies is designed as an interdisciplinary humanities and social sciences certificate program that aims to encourage students to better understand the histories, social cultures, languages, geographies, scientific knowledges, philosophies, folklore, and contemporary experiences of Newfoundland and Labrador. Upon completion of the certificate, students should have an improved ability to contextualize Newfoundland and Labrador's place in Canada and the world, including an ability to situate case studies that have application to broader knowledge development. The program is overseen by the Department of Folklore.

### 8.10.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.10.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Newfoundland and Labrador Studies for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.10.3 Declaring the Certificate in Newfoundland and Labrador Studies

Students interested in a Certificate in Newfoundland and Labrador Studies are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the Certificate can declare a Certificate in Newfoundland and Labrador Studies by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at the website.

### 8.10.4 Regulations for the Certificate in Newfoundland and Labrador Studies

The Certificate in Newfoundland and Labrador Studies students consists of 21 credit hours with no more than 9 credit hours in a single discipline as prescribed below:

1. 3 credit hours in a Critical Reading and Writing course that emphasizes the study of Newfoundland and Labrador, normally Folklore 1005; and,
2. 18 additional credit hours selected from Table 1 Courses Approved for the Certificate in Newfoundland and Labrador Studies, which may include up to 6 credit hours at the 4000 -level. Additional 4000 -level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.

Table 1 Courses Approved for the Certificate in Newfoundland and Labrador Studies

| 1000-level and 2000-level <br> Courses | 3000-level Courses or Above | 4000-level Courses (up to 6 <br> credit hours) |
| :--- | :--- | :--- |
| the former Economics 2070 | Archaeology 3290 <br> Folklore 1005, 2300 | Anthropology 4280 |
| Folklore 2230 or Sociology 2230 | English 3155, 3820 | Folklore 4310 |
| Geography 2495 | History 3110, 3120, 3813 |  |
| Linguistics 2025, 2026, 2210 | French 4400 or Folklore 4400 <br> Listory 3200 or Law and Society 3200 | History 4230, 4231 <br> Law Society 3014 <br> Lolitical Science 3880 <br> Religious Studies 3900, 3901 Society 4900 |
| Political Science 4680, 4880 |  |  |
| Sociology 4240 |  |  |

Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning.

### 8.10.5 Regulations Concerning the Former Lifelong Learning Certificate in Newfoundland and Labrador Studies

A student who completed the Certificate in Newfoundland and Labrador Studies offered by the former Division of Lifelong Learning is not eligible also to complete a Faculty of Humanities and Social Sciences Certificate in Newfoundland and Labrador Studies.

### 8.10.6 Regulation Concerning the Former Minor in Newfoundland and Labrador Studies

A student who is enrolled in, or who has completed the Minor in Newfoundland and Labrador Studies is not eligible to enroll in the Certificate in Newfoundland and Labrador Studies.

### 8.11 Certificate in Public Policy

www.mun.ca/hss/publicpolicy
www.mun.ca/hss/about/contact/coordinators.php
The Certificate in Public Policy is administered by the Department of Political Science.
The Certificate in Public Policy is designed for those who are interested in the study of governance and policy responses to public issues. The program's objective is to provide foundational knowledge that is essential for exploring topical issues in diverse policy fields and settings. The program is structured around introductory and advanced core courses in Political Science that promote understanding of the theoretical parameters of public policy, such as the processes and mechanisms that are relied upon to define and solve policy problems. These core skills and competencies are used in the analysis and study of public policy in a variety of interdisciplinary fields.

### 8.11.1 Faculty of Humanities and Social Sciences Certificate Regulations

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding General Regulations for Certificate Programs and Graduation Requirements.

### 8.11.2 Advising

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in Public Policy for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.
A tentative list of upcoming course offerings in the program can be found at www.mun.ca/hss/courses.php.

### 8.11.3 Declaring the Certificate in Public Policy

Students interested in a Certificate in Public Policy are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the certificate can declare a Certificate in Public Policy by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 8.11.4 Regulations for the Certificate in Public Policy

As part of the Certificate in Public Policy, students must complete a concentration in a policy subfield, which comprises foundation courses up to the 3000 -level and is overseen by a designated department. Students are encouraged to take courses in the concentration after completing initial foundation-level courses in public policy offered by the Department of Political Science. A student is not eligible to complete more than one concentration.
The Concentration in Economic Policy is overseen by the Department of Economics. Approved courses feature a foundation-level focus on the interrelationships between public policy, political institutions and economic systems.
The Concentration in Urban and Regional Policy is overseen by the Department of Geography. Approved courses feature a foundation-level focus on public policy concerning broad concepts of regionalism, municipal governance, and sub-national planning.
The Concentration in Governance is overseen by the Department of Political Science. Approved courses feature a foundation-level focus on the public policy process within government, emphasizing constitutional, legal and internal procedural factors.
The Certificate in Public Policy consists of 21 credit hours as follows:

1. 6 credit hours chosen from Political Science $1000,1010,2600,3600$, including at least one of Political Science 2600,3600 ;
2. 12 credit hours chosen from one of the following designated policy concentrations:
a. Economic Policy: Economics 1010 (or the former 2010), Economics 1020 (or the former 2020), and 6 additional credit hours chosen from Table 1 Approved Courses for the Concentration in Economic Policy, including at least 3 credit hours in Economics at the 3000-level; or
b. Urban and Regional Policy: Geography 1050, 2302 and 6 additional credit hours chosen from Table 2 Approved Courses for the Concentration in Urban and Regional Policy, including at least 3 credit hours in Geography 3350, 3701; or
c. Governance: 3 credit hours chosen from Political Science 3600 or 3620 (excluding Political Science 3600 if previously completed to fulfill the requirements in 1. above), and a minimum of 9 additional credit hours at the 3000 -level chosen from Table 3 Approved Courses for the Concentration in Governance, including at least 3 credit hours in Canadian Governance and 3 credit hours in International Governance; and
3. 3 credit hours in Political Science 4600 or 4630 .

Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning, and to generally follow Table 4 Suggested Course Sequencing for the Certificate in Public Policy.

Table 1 Approved Courses for the Concentration in Economic Policy

| 1000-level and 2000-level Courses | 3000-level Courses |
| :--- | :--- |
| Economics 1010 (or the former 2010) (required) | Anthropology 3200, 3260/Sociology 3260 |
| Economics 1020 (or the former 2020) (required) | Economics 3010, 3011, 3030,3070, 3080, 3140 <br> Geography 2302 <br> Sociology 2110 |
| Economics 3150, 3360, 311 <br> Political Science 3250, 3650 |  |

Table 2 Approved Courses for the Concentration in Urban and Regional Policy

| 1000-level and 2000-level Courses | 3000-level Courses |
| :--- | :--- |
| Anthropology 2280 <br> Geography 1050 (required), 2302 (required) | Anthropology 3058 <br> Economics 3711 <br> Geography 3340, 3350, 3701 <br> Political Science 3870, 3890 |

Table 3 Approved Courses for the Concentration in Governance

| Foundation Courses <br> (complete at least 1) | 3000-level Canadian Governance <br> Courses (complete at least 1) | 3000-level International Governance <br> Courses (complete at least 1) |
| :--- | :--- | :--- |
| Political Science 3600, 3620 | Economics 3711 <br> Law and Society 3014, <br> Political Science 3650, 3800, 3810, 3820, <br> $3830,3870,3880,3890$ | Political Science 3210, 3220, 3250, 3280 |

Table 4 Suggested Course Sequencing for the Certificate in Public Policy
First 6 credit hours: Choose from Political Science 1000, 1010, 2600, 3600 (take one or both of 2600, 3600)
Next 12 credit hours: Complete a Policy Concentration
Last 3 credit hours: Choose from Political Science 4600 or Political Science 4630
Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.

### 8.11.5 Course Prerequisites

Many approved courses are suitable for students in all disciplines without a background in the discipline. Other approved courses may have prerequisites.

### 8.11.6 Regulations Concerning the Former Lifelong Learning Certificate in Public Administration

A student who completed the Certificate in Public Administration or the Certificate in Regional Policy and Development offered by the former Division of Lifelong Learning is also eligible to complete a Faculty of Humanities and Social Sciences Certificate in Public Policy.

## 9 Waiver of Regulations for Undergraduate Students

### 9.1 Student Responsibility and Academic Advice

Students are responsible for following regulations as stipulated in the University Calendar in all respects. In accordance with UNIVERSITY REGULATIONS, Academic Advising, the ability to make sound academic decisions requires access to sound academic advice. Information in the University Calendar and in an academic degree audit prevails over any other advice provided by any representative of Memorial University of Newfoundland. Requests for an academic degree audit are made by emailing the Office of the Registrar at audit_arts@mun.ca.
In extenuating circumstances that are duly documented, certain regulations involving course pre-requisites or co-requisites, departmental regulations, and faculty regulations may be waived or modified in accordance with UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate).

### 9.2 Course Prerequisites

Matters involving course prerequisites or co-requisites require approval of both the course instructor and the Head of the academic unit that is delivering the course. Requests are made to the course instructor in person or in writing from the student's @mun.ca email account. Students should provide a detailed explanation of the reasons for the request.

### 9.3 Residence Requirements

Further to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Residence Requirements for a student's first degree, the Faculty's Undergraduate Waivers and Appeals Committee may permit students to complete, at another recognized institution, up to 15 of the last 30 credit hours or equivalent required for the degree, subject to the following:

1. the student must confirm that no reasonable options exist to complete eligible courses offered by Memorial University of Newfoundland;
2. the rationale and any special circumstances are documented by the student in writing as outlined in Waiver of Regulations for Undergraduate Students, Other Regulations;
3. a letter of permission from the Office of the Registrar must accompany the request, confirming that the proposed courses will qualify for transfer to meet the student's program requirements; and,
4. the student must obtain written approval from the Head of the appropriate academic unit(s) at Memorial University of Newfoundland supporting the request and confirming the applicability of the equivalent courses for the student's program.

### 9.4 Other Regulations

1. Students facing extenuating circumstances should discuss their situation with an academic advisor(s), up to and including the Head of Department and/or program coordinator.
2. Requests for waivers of degree or program regulations and for adjustment of course requirements must be made in writing to the Assistant Registrar responsible for the Faculty of Humanities and Social Sciences, c/o The Office of the Registrar. In the written request, the student must clearly and fully provide:

- Full name;
- Current address and telephone number;
- @mun.ca email address
- Student ID number;
- The request that is being made, including relevant information from the University Calendar and a course syllabus if applicable;
- A detailed explanation of the reasons for the extenuating request, supported by all relevant documentation; and
- The proposed resolution.

3. Only requests arising from extenuating circumstances beyond a student's control and which are properly documented will be brought forward to the Faculty of Humanities and Social Sciences' Undergraduate Waivers and Appeals Committee.
4. Terms of reference for the Undergraduate Waivers and Appeals Committee are available on the Faculty of Humanities and Social Sciences website at www.mun.ca/hss/faculty_staff/council.php. In considering a request for a waiver or substitution, the Committee normally considers the following factors:

- the need to uphold the academic integrity of all programs within the Faculty of Humanities and Social Sciences;
- the need to apply Calendar regulations in a consistent and fair manner;
- the opinion of the Head of Department and/or program coordinator;
- that delayed graduation is not in itself an extraordinary circumstance; and
- that medical documentation from a health professional must be sufficiently specific to allow proper consideration of the request. For further details, refer to UNIVERSITY REGULATIONS - Information Required in Certificates from Health Professionals.

5. A Committee decision is communicated by the Assistant Registrar to the student's @mun.ca account and to the head of department and/or program coordinator. If appropriate, the Committee, the head and/or the coordinator will also examine whether the Calendar entry should be modified.
6. The procedure for appealing unfavourable decisions is outlined in the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Appeal of Decisions.

## 10 Study Abroad (Harlow Campus and International Field Schools)

The Faculty of Humanities and Social Sciences periodically offers instruction at the Harlow Campus, England and in field school locations around the world. These provide students with the opportunity to study abroad combined with access to the expertise of Memorial University of Newfoundland instructors. Classroom and learning experiences occur in a safe learning environment. Students are exposed to new surroundings, diverse cultures and languages, skills development. extracurricular trips and guest speakers in ways that are possible only by spending time in another locale. The ability to complete Memorial University of Newfoundland courses elsewhere as part of a local cohort acts as an extension of campus learning, delivering exceptional value in terms of financial commitment, administration and peace of mind. Those who complete time abroad develop skills that help them prepare for today's global society, which increasingly involves travelling to unfamiliar locations, working in multicultural environments, adapting to new
situations, and thinking creatively.
The content of the Harlow Campus and field school courses changes depending on the departments and instructors involved. Priority is normally given to delivering courses that are listed among the requirements for a Major, Minor, Diploma and/or Certificate program. Students wishing to enrol must have completed a minimum number of credit hours at the university level as specified by the participating department, and satisfy any prerequisites which may be required. Enrolment is limited and competitive. The relevant admission criteria, as well as other information, may be obtained from the Office of the Dean of Humanities and Social Sciences and the participating department.
Harlow campus semester and field school courses are normally clearly identified in the course title and can be found among a department's course descriptions. In addition, other courses or portions thereof are from time-to-time delivered outside of Canada by a variety of faculty members in the Humanities and Social Sciences. For information about upcoming interactional courses, contact the Go Abroad Coordinator at www.mun.ca/goabroad.

### 10.1 Harlow Campus Semester Courses

Courses delivered exclusively at Harlow Campus include:
Classics 3710-3729
English 3710-3729
Folklore 3710-3729
Gender Studies 3710-3720
Geography 3710-3729
History 3710-3729 (excluding 3713, 3728), 4360-4380
Medieval Studies 3710-3729
Political Science 3980-3999
In addition, a number of courses listed under Course Descriptions are periodically offered at the Harlow Campus. For further information, contact the applicable department.

### 10.2 Field School Courses Delivered Outside of Canada

Field school courses delivered exclusively outside of Canada include:
French 3102, 3103, 3507, 3508
German 2511, 3510, 3511
The Department of Modern Languages, Literatures and Cultures regularly offers a one semester French immersion program in St-Pierre (July and Fall Frecker Programs) and periodically offers Russian language courses in Russia and Spanish language study abroad.
In addition, a number of courses listed under Course Descriptions are periodically offered at the Harlow Campus. For further information, contact the applicable department.

### 10.3 International Exchanges

Memorial University of Newfoundland offers international exchanges with approved partner institutes around the world. Information is available by e-mail to international@mun.ca.

1. All courses are subject to overall degree requirements, including residence requirements and departmental regulations.
2. It is a student's responsibility to confirm that courses completed at another institution are eligible for transfer to Memorial University of Newfoundland. To confirm eligibility, a student is expected to begin by consulting with academic advisors and undergraduate liaisons of the relevant academic department(s). A degree audit may be required.
3. While planning for an International exchange, a student must research the course offering(s) at the host institute and request the associated syllabi. Before leaving the country the student must submit a completed letter of permission (www.mun.ca/regoff/admission/Letter_of_Permission.pdf) along with the relevant syllabi to the Office of the Registrar.
4. Upon completion of the international exchange, a student must request that the host institute send the student's transcripts directly to the Office of the Registrar in order for the transcripts to be deemed official. For more information regarding transfer of credit, the student should consult with the Faculty's International Exchange Coordinator or the Office of the Registrar.

## 11 Experiential Learning

The Faculty of Humanities and Social Sciences offers a number of experiential learning opportunities. Co-operative education degree programs feature full-time employment in positions related to the student's area of study. These positions are completed as part of work term courses that are reserved for full-time students enrolled in the program. Field school courses provide hands-on instructional experiences as part of a regular degree or diploma program. Internship courses feature a part-time work placement of short duration that is completed in conjunction with coursework and are otherwise treated as a regular course.

### 11.1 Co-operative Education Degree Programs

Major in Archaeology (Co-operative)
Honours Major in Archaeology (Co-operative)
Major in Economics (Co-operative) (B.A. or B.Sc.)
Honours in Economics (Co-operative) (B.A. or B.Sc.)
Major in Political Science (Co-operative)
Honours in Political Science (Co-operative)
For further information, contact the Division of Co-operative Education or the appropriate department.

### 11.2 Co-operative Education Work Term Courses

Archaeology 300W, 400W
Economics 299W, 399W, 499W
Political Science 260W, 360W, 460W
For further information, contact Co-operative Education or the appropriate department.

### 11.3 Field School Courses Normally Delivered Within Canada

Archaeology 2583, 3585, 3586
English 5000
Geography 3230
For further Information, contact the appropriate department or course instructor.

### 11.4 Internship Courses Normally Delivered Within Canada

Political Science 4600
Sociology 4100
For further Information, contact the appropriate department or course instructor.

## 12 Limited Enrolment Courses and Transfer Credits

### 12.1 Limited Enrolment Courses

Certain course offerings in the Faculty of Humanities and Social Sciences will be identified as being Limited Enrolment Courses and will be clearly identified as such in the University Calendar, under Course Descriptions. Students who have registered for a Limited Enrolment Course must confirm their registration either (1) by attending at least one of the first three hours of lectures in the course (and the first meeting of any laboratory section of the course, if appropriate); or (2) by notifying the department in writing within the first five university working days of the semester. Students who do not confirm their registration may be dropped from the course on the recommendation of the Head of Department.

### 12.2 Requirement for Courses Delivered at Memorial University of Newfoundland

1. A student who completes courses at another university in the area of a Major offered by the Faculty of Humanities and Social Sciences is required to complete at least 18 credit hours in the Major subject in Memorial University of Newfoundland courses. Courses taken at universities and/or colleges which are included in formal institutional exchange agreements with this University are not subject to the requirement of this clause.
2. A student who completes courses in the area of the Minor at another university is required to complete at least 12 credit hours in that subject at Memorial University of Newfoundland.
3. A minimum of 12 credit hours in courses prescribed for a diploma program must be completed at this University.
4. A minimum of 9 credit hours in courses prescribed for a certificate program must be completed at this University.

### 12.3 Grenfell Campus Courses

1. Courses delivered only at Grenfell Campus shall be treated on a case-by-case basis.
2. Specific (designated) Grenfell Campus courses may be eligible to fulfill the Core Requirements. Art History, Environmental Sustainability, Humanities, Social/Cultural Studies, and Tourism courses are eligible to fulfill the Breadth of Knowledge Requirement. A course that is identified as Critical Reading and Writing (CRW) in the same manner as in this Faculty is eligible towards the Critical Reading and Writing Requirement. A designated Writing (W) course is eligible to fulfill the Critical Reading and Writing Requirement if it is demonstrated that the course follows the CRW course guidelines available at www.mun.ca/hss/crw. A course in a language, other than English, is eligible to fulfill the Language Study Requirement if it is demonstrated that the course follows the LS course guidelines available at www.mun.ca/hss/ls. A designated Quantitative Reasoning and Analysis (QRA) course is eligible if it is demonstrated that the course follows the QR course guidelines available at www.mun.ca/hss/qr. For further information, contact the Dean of the Faculty of Humanities and Social Sciences.

### 12.4 Transfers From Other Post-Secondary Institutions

The following Faculty of Humanities and Social Sciences regulations are in addition to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).

1. As per UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation, a student who completes fewer than one-half of the credit hours required for the degree is eligible only to obtain an "unclassified" degree. For these students, at least one-half of the minimum number of credit hours required for a Major (or a second Major) and at least one-third of the minimum number of credit hours required for a Minor must be completed at this University.
2. No more than 9 of the 18 combined credit hours required to fulfill the Critical Reading and Writing (CRW), Language Study (LS), and Quantitative Reasoning (QR) Requirements may be transferred as equivalencies from another institution. In addition, no more than 3 credit hours in a CRW course may be transferred towards the Critical Reading and Writing requirement, with the exception of pre-authorized courses from the College of the North Atlantic that follow this University's CRW guidelines. Additional transferred credit hours that would normally qualify towards these requirements may be eligible to fulfill other requirements of the degree.
3. University-level study of a language not taught at this University may be eligible for unspecified LANG credit hours, and may be eligible towards the Language Study (LS) Requirement, subject to review by the Head of Modern Languages, Literatures and Cultures (or designate) and the Office of the Registrar.
4. University-level international study may be eligible towards the iBA International Studies (IS) Courses Requirement if it is demonstrated that it follows the IS course guidelines available at www.mun.ca/hss/IS.
5. The Faculty of Humanities and Social Sciences' Curriculum and Programs Committee is responsible for assessing the eligibility of specific (designated) Grenfell Campus courses for the Bachelor of Arts General Degree Requirements, Core Requirements.
6. Limits on credit transfer hours exist for the Honours, Major and Minor in French. Refer to Program Regulations, Department of Modern Languages, Literatures and Cultures.
7. Limits on credit transfer hours exist for the Honours, Major and Minor in History. Refer to Program Regulations, Department of History.
8. Limits on credit transfer hours exist for the Honours. Major and Minor in Spanish. Refer to Program Regulations, Department of Modern Languages, Literatures and Cultures.
9. Unspecified credit hours transferred as University (UNIV) are ineligible toward the requirement for 78 credit hours in Humanities and Social Sciences courses. They may be eligible as electives comprising the remaining 42 credit hours of the 120 credit hours for the
degree.

## 13 Dean's List

### 13.1 General Information

The Dean's List recognizes academic excellence. University information about the Dean's List is outlined in UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Dean's and Vice-President's List. In the Faculty of Humanities and Social Sciences (HSS), undergraduate students who meet all of the following criteria shall have a notation placed on their transcript that the student was named to the Dean's List.

### 13.2 Procedure and Criteria

1. As per UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Dean's and Vice-President's List, General Information, a maximum of 10 percent of students in the Faculty shall be eligible. In the event that more than 10 percent of students meet the academic criteria, the minimum grade threshold shall increase accordingly.
2. Eligibility is determined at the end of the Winter semester. Eligibility is based on academic performance in the nominating period, which is the entirety of the three preceding semesters (Spring, Fall and Winter, inclusive). After the release of final grades in the Winter semester, a list of eligible candidates is generated by the Office of the Registrar and reviewed by the Dean's Office.
3. All full-time students who have declared a Major or Honours program in the Faculty of Humanities and Social Sciences are eligible and will be automatically considered. A student must be enrolled in a Bachelor of Arts, Bachelor of Arts (Honours), International Bachelor of Arts, Bachelor of Arts (Co-operative), Joint Bachelor of Arts/Bachelor of Science or Joint Bachelor of Arts/Bachelor of Commerce program. Alternatively, a student may complete the requirements for the degree during the nominating period. Students with INC grades are treated on a case-by-case basis.
4. The official transcript must demonstrate that the student has met all of the following minimum criteria during the nominating period:
a. completed at least 27 credit hours in courses delivered by Memorial University of Newfoundland;
b. obtained a grade point average of 3.50 or higher;
c. obtained a final numeric grade average of no less than $80 \%$;
d. obtained a final numeric grade of no less than $80 \%$ (letter grade of A) in at least seven courses, of which at least five courses were delivered by this Faculty's Major programs identified in Degree Regulations - General and Honours Degrees;
e. obtained no more than three final numeric grades less than $80 \%$ (letter grade of $B$ or lower);
f. obtained no final numeric grades below $50 \%$ (letter grade of $F$ or $F A L$ ); and
g. did not commit an academic offense, as outlined in UNIVERSITY REGULATIONS-General Academic Regulations (Undergraduate), Academic Misconduct.
5. For the exclusive purposes of establishing eligibility in 4. above:
a. Grades and grade point average are examined to the second decimal place, and are not rounded up.
b. A student who was required during the nomination period to complete one or more work terms as part of a co-operative education degree program is eligible if a Pass With Distinction standard was achieved. In such cases, for the exclusive purposes of the Dean's List calculation, the Pass With Distinction semester will be treated as a final numeric grade of $80 \%$ (letter grade of A) in 5 courses ( 15 credit hours).
6. Courses identified as "TR" (transfer) on a Memorial University of Newfoundland transcript are not eligible for consideration. Regardless of a student's program of study, a recommended planning process is outlined at International Study Option and/or in the student's Major program.

### 13.3 Dean's Award for Academic Excellence

A student named to the Faculty of Humanities and Social Sciences Dean's List a fourth time will receive a transcript notation of "Dean's Award for Academic Excellence in Humanities and Social Sciences".

## 14 Programs ând Regulations

### 14.1 Anthropology

www.mun.ca/anthro
All students who major in Anthropology will be assisted by a faculty advisor who will help them in planning their academic programs. For this purpose, it is essential that students declare their major at an early stage of their studies.
Anthropology course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Anthropology and are designated by ANTH.

### 14.1.1 Department of Anthropology Description

Anthropology explores how people and groups across the globe engage with the social, cultural, political, and economic processes that shape the contemporary world.
Anthropologists spend extended periods of time with the people they study in order to understand their practices and beliefs and how such practices and beliefs are entangled with systems of power. In short, the study of anthropology facilitates cross-cultural understanding and critical engagement with global problems. Students learn how concepts such as class, gender, and ethnicity relate to a variety of areas including development, environmental crises, economic processes, imaginary worlds, labour, media, politics, religion, tourism, and heritage. Our undergraduate programs foster skills needed to both think critically about these topics and engage with an increasingly globalized and complex world.
The study of anthropology provides a strong background for students who intend to specialize in any of the social sciences and humanities or in medicine, nursing, social work, education, law, business, government, communications and many other fields which require an understanding of global processes and a strong grounding in the cross-cultural study of human behaviour. Anthropology students have found employment with public, private and non-government organizations in diverse fields, including: academia; public policy; print, radio, and television journalism; documentary film-making; healthcare; international development; and social and environmental activism.

### 14.1.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.1.3 General Degree

### 14.1.3.1 Major

The student majoring in Anthropology must meet the requirements listed under Program Regulations - General and Honours Degrees. A minimum of 39 credit hours in Anthropology is required including:

1. Anthropology 1031;
2. 9 credit hours at the 2000 -level chosen from any of the Anthropology courses between 2410 and 2416 ;
3. Anthropology 3300 and 3410 ;
4. 9 credit hours from Anthropology offerings at the 4000-level, of which one must be Anthropology 4412; and
5. the remaining 12 credit hours are to be chosen from any of the Anthropology 3000-or 4000 -level offerings.

### 14.1.3.2 Minor

A minor in Anthropology requires the completion of 24 credit hours including:

1. Anthropology 1031;
2. 6 credit hours at the 2000 level chosen from any of the Anthropology courses between 2410 and 2416 ;
3. Anthropology 3410;
4. 6 credit hours from the 4000 level including Anthropology 4412; and
5. 6 credit hours chosen from Anthropology offerings at the 3000 level or above.

### 14.1.3.3 Joint Major

As an alternative to a minor, a student may choose to complete a major in Anthropology and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Anthropology, 3 fewer credit hours shall be required at the 3000- or 4000 -level to fulfill clause 5. of the Major above.

### 14.1.4 Honours Degree

1. Admission: see Bachelor of Arts (Honours) Degree Regulations
2. Honours students are required to complete 60 credit hours in Anthropology following the requirements of the Major. In addition, students must include Anthropology 4994 and 4995. Thirty-six of the 60 credit hours must be at the 3000 or 4000 level. Students must also meet the requirements of the Program Regulations - General and Honours Degrees.

### 14.1.5 Regulations for Joint Honours, Anthropology and Another Major Subject

1. Students must fulfil the requirements of the Bachelor of Arts (Honours) Degree Regulations.
2. Students must complete 42 credit hours in Anthropology courses and include the following:
a. Anthropology 1031
b. 9 credit hours at the 2000 level chosen from any of the Anthropology courses between 2410 and 2416;
c. Anthropology 3300 and 3410 ,
d. 9 credit hours in Anthropology courses at the 4000 level including Anthropology 4412; and
e. 15 credit hours to be chosen from any of the 3000 or 4000 level Anthropology offerings.

### 14.1.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Anthropology, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Anthropology to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Anthropology courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Anthropology IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.1.7 Certificate in Food Studies

The Department of Anthropology administers the Certificate in Food Studies. Credit hours in Anthropology may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.2 Archaeology

www.mun.ca/archaeology

### 14.2.1 Department of Archaeology Description

Archaeologists and bioarchaeologists study past human cultures and behavior through the material left behind: artifacts and features, plant and animal remains, human remains, sediments, sites, and their associated landscapes. In the Department of Archaeology, our students engage in practical training and experiential learning in classroom, laboratory, and field work settings that provide a comprehensive education and transferable skills. State-of-the-art laboratories specializing in applied archaeological sciences, archaeobotany, archaeological conservation, and prehistoric, historical, and aboriginal archaeology integrate undergraduates into community-university research initiatives from Northern Labrador to French Guiana and from British Columbia to Northwest Europe. As one of the largest Archaeology departments in the country, we train our students to become effective researchers, critical thinkers, and active stewards for our shared archaeological heritage.
The Undergraduate Coordinator assists all Archaeology majors and minors in planning their academic programs. For this purpose students should register with the Department at an early stage of their studies.
In addition to the Archaeology core program outlined under General Degree, First Courses, students may wish to follow Table 1 Suggested Course Progression for Bioarchaeology/Archaeological Science Specialization or Table 2 Suggested Course Progression for Historical Archaeology Specialization or Table 3 Suggested Course Progression for Prehistoric Archaeology Specialization below.
The following programs are available in the Department:

1. Major in Archaeology - Bioarchaeology/Archaeological Science Specialization, Historical Archaeology Specialization, Prehistoric Archaeology Specialization
2. Minor in Archaeology
3. Joint Major in Archaeology
4. Honours in Archaeology
5. Joint Honours in Archaeology and Another Major Subject
6. Major in Archaeology (Co-operative) Education (ACE)
7. Honours Major in Archaeology (Co-operative) (ACE)

Archaeology course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Archaeology and are designated by ARCH.

### 14.2.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A sfudent is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.2.3 General Degree

### 14.2.3.1 First Courses

The student majoring in Archaeology must meet the requirements listed under Regulations for the General Degree of Bachelor of Arts. Under these Regulations, a minimum of 36 credit hours in Archaeology is required. Students wishing to concentrate in this option must complete the Required Courses Archaeology 1000 (or the former 1030), 2480, 4182, and 4411. In addition, students are required to take 3 credit hours from Group I (Core Courses); 9 credit hours from Group 2 (Field and Laboratory Courses); 6 credit hours from Group 3 (Regional Courses); and 6 credit hours from Group 4 (Topical Courses).
Course Groupings for the Archaeology Program:
Required Courses: 1000 (or the former 1030), 2480, 4182, 4411.
Group 1 (Core Courses): 1001 (or the former 2590), 2430, 2450.
Group 2 (Field and Laboratory Courses): 2583 or the former 3583, 3040, 3585, 3586, 3650, 3710, 4015, 4151, 4152, $4153,4171$.
Group 3 (Regional Courses): 2481, 2482, 3290, 3291, 3500, 3505, 3510, 3515, 3520, 3525, 3580, 3588, 3592, 3651.
Group 4 (Topical Courses): 2494, 3001, 3020, 3536, 3561, 3582, 3584, 3590, 3593, 3594, 3687, 3688, 3750, 3850, 3860, 4041, 4043, 4150, 4172, 4173, 4500, 4994.

Table 1 Suggested Course Progression for Bioarchaeology/Archaeological Science Specialization

| Term | Courses |
| :--- | :--- | :--- |
| First Year | ARCH 1000 (or the former 1030) or ARCH 1005 <br> ARCH 1001 (or the former 2590) <br> ARCH 2480 |
| Second Year | ARCH 2430 <br> ARCH 2450 <br> ARCH 3040 <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of study. <br> The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), ARCH 3585 <br> and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course requirements (9 <br> credit hours). |
| Third Year | ARCH 3020 <br> ARCH 3687 <br> ARCH 4041 <br> ARCH 4043 <br> 3 credit hours from Group 3 (Regional Courses) <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of study <br> The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), ARCH 3585 <br> and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course requirements (9 <br> credit hours). |
| Fourth Year | ARCH 4041 <br> ARCH 4043 <br> ARCH 4182 <br> ARCH 4411 <br> 6 credit hours from ARCH 4150, 4151, 4152 or 4153 |

Table 2 Suggested Course Progression for Historical Archaeology Specialization

| Term | Courses |
| :--- | :--- |
| First Year | ARCH 1000 (or the former 1030) or ARCH <br> ARCH 1001 (or the former 2590) or <br> ARCH 2480 |
| Second Year | ARCH 2494 <br> ARCH 3582 (or the former 2582) <br> ARCH 3590 <br> ARCH 3650 <br> ARCH 3651 <br> ARCH 3750 <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of study. <br> The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), ARCH 3585 <br> and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course requirements (9 <br> credit hours). |
| Third Year | ARCH 3520 <br> ARCH 3525 <br> ARCH 3710 <br> ARCH 3850 <br> ARCH 3860 <br> ARCH 4015 <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of study. <br> The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), ARCH 3585 <br> and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course requirements (9 <br> Credit hours). |
| Fourth Year | ARCH 4182 <br> ARCH 4411 <br> 3 credit hours from ARCH 3001, 3584, 3592 |

Table 3 Suggested Course Progression for Prehistoric Archaeology Specialization

| Term | Courses |
| :--- | :--- |
| First Year | ARCH 1000 (or the former 1030) <br> ARCH 1001 (or the former 2590) or ARCH 1005 <br> ARCH 2480 |
| Second Year | ARCH 3290 <br> ARCH 3291 <br> ARCH 3510 <br> ARCH 3588 <br> ARCH 3688 <br> 3 credit hours from Group 1 (Core courses) <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of <br> study. The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), <br> ARCH 3585 and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course <br> requirements (9 credit hours). |
| Third Year | ARCH 3500 <br> ARCH 3505 <br> ARCH 3515 <br> ARCH 4015 <br> ARCH 4153 <br> Students are strongly recommended to take the Archaeology Field School after their second or third year of <br> study. The courses associated with the field school include ARCH 2583 or the former 3583 (Intersession), <br> ARCH 3585 and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course <br> requirements (9 credit hours). |
| Fourth Year | ARCH 4182 <br> ARCH 4411 <br> 3 credit hours from ARCH 4151, 4171, 4172, 4173 |

### 14.2.3.2 Minor

A minor in Archaeology may be achieved by completing the following courses: Archaeology 1000 (or the former 1030) and 2480; 6 credit hours in Archaeology courses at the 3000-level; 3 credit hours in Archaeology courses at the 4000-level, 9 credit hours chosen from Archaeology courses at any level, except Archaeology 2492, 2493 or the former Archaeology 2491, or 2495. ARCH 1001 or ARCH 1005 is a recommended choice.

### 14.2.3.3 Joint Major

As an alternative to a minor, a student may choose to complete a major in Archaeology and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Archaeology, 3 fewer credit hours shall be required from Group 4 (Topical Courses) to fulfill First Courses above.

### 14.2.4 Honours Degree

1. Students intending an Honours program are required to be majors and must complete 60 credit hours in Archaeology, at least 36 of which must be at the 3000 level or above including Archaeology 4994 and Archaeology 4995 (or the former Archaeology 4996). ARCH 1001 or ARCH 1005 is a recommended choice. Students must also meet the Regulations for the General Degree of Bachelor of Arts, and Regulations for the Honours Degree of Bachelor of Arts. Students are strongly advised to consult with the Archaeology Undergraduate Coordinator and Honours Supervisor for assistance with planning their academic program.

### 14.2.5 Regulations for Joint Honours, Archaeology and Another Major Subject

1. Students must fulfill the Regulations for the Honours Degree of Bachelor of Arts.
2. Students must complete 42 credit hours in Archaeology courses and include the following:
a. ARCH 1000 (or the former 1030);
b. Archaeology 2430, 2480 and 3 other credit hours in Archaeology at the 2000 level;
c. 15 credit hours in Archaeology courses at the 3000 level, chosen in consultation with an Honours supervisor; and
d. Archaeology 4182 and 4411 and 9 other Archaeology credit hours at the 4000 level, with a grade of " $B$ " or better.

### 14.2.6 Major in Archaeology (Co-operative)

The Major in Archaeology (Co-operative) Education (ACE) allows Archaeology students to apply skills in a variety of settings. The program is available to full-time Archaeology majors only.
The ACE Program is an extension of the Bachelor of Arts and Bachelor of Arts Honours programs. The program is administered by the designated Academic Staff Member in Co-operative Education (ASM-CE) for the Faculty of Humanities and Social Sciences. With the help of the ASM-CE and the Department of Archaeology, students will seek placement opportunities within the Province, within Canada, and internationally.
Students who participate in the ACE program must meet the requirements listed under the Regulations for the General Degree of Bachelor of Arts and First Courses above. In addition, the ACE Program requires two work term courses, 300W and 400W, as described in Work Terms.

### 14.2.6.1 Admission Requirements

1. Admission to the ACE program is limited and selective.
2. Applicants should note that it is possible to apply to enter the ACE program only in the Fall semester of each academic year. ACE application forms and the application deadline are available at www.mun.ca/archaeology/ace.
3. The primary criterion used in reaching decisions on applications for admission is overall academic achievement. Students with weak overall academic records are unlikely to be admitted. Applicants may be asked to attend an interview.
4. To be eligible for admission to the ACE program an applicant must have successfully completed a minimum of 30 credit hours with an overall average of at least $65 \%$. All applicants must have completed Archaeology 1000 (or the former 1030) and 2480 and an Archaeology Field School or Lab School or have significant archaeology experience. It is also advised that students choose courses which can satisfy the requirements for the Core Requirements as outlined under Bachelor of Arts General Degree Components, including courses in a second language.
5. Transfer students from other universities will be placed in the term of the program judged to be appropriate considering equivalent credits, as determined by the Department and the designated ASM-CE.

### 14.2.6.2 Program of Study

1. Promotion from each term requires a passing grade in all required major courses and an overall average of at least $65 \%$ in all courses including electives. A student who fails a required major course, fails to maintain the overall average of $65 \%$ and/or does not maintain full-time status will not be promoted to the next term and will be required to withdraw from the ACE program.
2. In addition to the 30 credit hours required for admission, a student is required to complete a total of 120 credit hours (including a field school or lab school) and two Work Terms. A student wishing to change the sequence of the work terms must first consult with the ACE Coordinator, the designated ASM-CEs and receive written approval from the Head of the Department or delegate.
3. A student may wish to follow Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative) outlined below under the Honours in Archaeology (Co-operative). A student is encouraged to meet with the Undergraduate Liaison early in the program in order to establish a course pattern that satisfies the regulations for this program.
4. UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Classification of Students notwithstanding, a student will require permission from the Head of the Department to register for courses while on work terms if the courses are in addition to the prescribed program. Normally, work terms are considered equivalent to a full-time course load with no time for additional course work.

### 14.2.6.3 Work Term Placement

1. Students are ultimately responsible for securing their work term placements. ASM-CEs provide support for the job search and inform students of potential opportunities.
2. A student who applies for admission to the ACE program gives permission to the University to provide a copy of the student's resume and university transcript to potential employers.
3. A student is required to complete professional development seminars offered by the designated ASM-CE.
4. A student who is enrolled in the ACE Program may independently obtain a work term placement in consultation with the ASM-CE. Such employment positions must satisfy the criteria for work terms, be confirmed by the employer, and must be approved by the ASM-CE before the first day of the work term according to the University Diary.
5. Work terms are normally 12-16 weeks in duration, full-time and paid. Remuneration for work terms are determined by employers based on their internal wage structures.
6. The start and end dates for each work term are shown in the University Diary

### 14.2.6.4 Registration and Evaluation of Performance

1. In Work Terms 1 and 2, a student must register for Archaeology 300W and 400W respectively.
2. The Work Term evaluations shall consist of two components:
a. On-the-job Student Performance:

Job performance shall be assessed by the ASM-CE using information gathered during the Work Term and input from the employer towards the end of the Work Term. Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
b. Work Term Assignment(s):

- One or more work term assignment(s) as outlined in the course syllabus. Evaluation of the work term assignment(s) will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
The evaluation of the job performance and the work term assignment(s) will result in one of the following final grades being awarded:
- Pass with Distinction: Indicates a classification of OUTSTANDING in both the work term assignment(s) and the job performance.
- Pass: Indicates a classification of ABOVE EXPECTATIONS, SATISFACTORY, and/or MARGINAL PASS for the work term assignment(s) and the job performance or an overall grade of OUTSTANDING in only one of the two components.
- Fail: Indicates a classification of FAIL in the work term assignment(s) and/or the job performance.

For promotion from the Work Term, a student must obtain at least a Pass in the applicable work term course. Students should also refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) of the University. The grades awarded for each work term will be noted on the transcript of the student.
3. A student will not be eligible to continue in the ACE program if the student: withdraws from a Work Term subsequent to a job placement without acceptable cause and/or without prior approval from both the ASM-CE and the Department of Archaeology; fails to honour an agreement to work with an employer; and/or conducts themselves in such a manner as to cause their discharge from the job.

### 14.2.7 Honours Major in Archaeology (Co-operative)

### 14.2.7.1 Admission Requirements

See Major in Archaeology (Co-operative), Admission Requirements. In addition to the regulations outlined below, a student must also meet the Program Regulations - General and Honours Degree Bachelor of Arts General Degree.

### 14.2.7.2 Program of Study

In addition to meeting the requirements for the Major in Archaeology (Co-operative), Honours in Archaeology (Co-operative) students must also meet the following regulations.

1. A student should also refer to the Bachelor of Arts (Honours) Degree Regulations. Students intending to complete an Honours
program are required to be majors and must complete 60 credit hours in Archaeology including Archaeology 4994 and Archaeology 4995 (or the former Archaeology 4996). In addition, the ACE Program requires two work Term courses, 300W and 400W, as described in Work Terms.
2. Promotion from each Term requires an overall average of at least $65 \%$ in all courses including electives. A student who fails a required course or fails to maintain an overall average of $65 \%$ and/or does not maintain full-time status will not be promoted to the next term and will be required to withdraw from the ACE program. See also UNIVERSITY REGULATIONS - Regulations for the Honours Degree.
3. In addition to the 30 credit hours required for admission, students are required to complete 120 credit hours (including a field school) and two Work Terms. A student wishing to change the sequence of the work terms must first consult with the ACE Coordinator, the ASM-CE and receive approval in writing from the Head of the Department or delegate.
4. UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Classification of Students notwithstanding, a student will require permission from the Head of the Department to register for courses while on work terms if the courses are in addition to the prescribed program. Normally, work terms are considered equivalent to a full-time course load with no time for additional course work.
5. A student may wish to follow Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative) outlined below. A student is encouraged to meet with the Undergraduate Liaison early in the program in order to establish a course pattern that satisfies the regulations for this program.

Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative)

| Year | Courses |
| :--- | :--- |
| Year 1 | ARCH 1000 (or the former 1030) <br> ARCH 2480 |
| Year 2 | 3 credit hours from Group 1 (Core Courses) <br> 6 credits hours from Group 3 (Regional Courses) and/or Group 4 (Topical Courses). <br> Students applying for the ACE Program are required to take an Archaeology Field or Laboratory <br> School after their second year of study. The courses associated with the field/lab school include <br> ARCH 2583 or the former 3583 (Intersession), ARCH 3585 and ARCH 3586 (Summer Session), <br> and these count towards the Field and Laboratory course requirements -9 credit hours Group 2 <br> (Field and Laboratory Courses). |
| Year 3 | 3 credits hours from Group 3 (Regional Courses) <br> Work Term 1 |
| Year 4 | ARCH 4182 <br> ARCH 4411 <br> ARCH 4994 and ARCH 4995 (or the former 4996) - Honours Program only <br> Work Term 2 <br> 3 credit hours from Group 4 (Topical Courses) |

### 14.2.7.3 Work Term Placement

See Major in Archaeology (Co-operative) Education (ACE).
14.2.7.4 Registration and Evaluation of Performance See Major in Archaeology (Co-operative) Education (ACE).

### 14.2.8 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Archaeology, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Archaeology to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.2.9 Diploma in Ancient Worlds

The Department of Archaeology administers the Diploma in Ancient Worlds. Credit hours in Archaeology may be eligible to jointly fulfill requirements of a degree and a diploma and/or a certificate. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.2.10 Certificate in Aboriginal and Indigenous Studies

The Department of Archaeology administers the Certificate in Aboriginal and Indigenous Studies. Credit hours in Archaeology may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.3 Classics

www.mun.ca/classics

### 14.3.1 Department of Classics Description

Programs of the Department of Classics are designed to acquaint students with the ancient Greek and Roman cultures from which Western Civilization has developed. The Department endeavours to instruct with and utilize the full range of evidence available, including texts in Greek and Latin as well as material culture. Furthermore, it is understood that a degree of access can often be achieved by studying antiquity through translated sources. The Department therefore is committed to offering a wide range of courses and programs designed to explore the many aspects of the discipline.
The following programs are available in the Department:

## 1. Major in Classics

2. Minor in Classics
3. Joint Major in Classics
4. Honours in Classics
5. Joint Honours in Classics

Classics course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Classics and are designated by CLAS.

### 14.3.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.3.3 General Degree

### 14.3.3.1 Major in Classics

Students for a Major in Classics are advised to choose their program in consultation with the Department.
The major program consists of a minimum of 39 credit hours in Classics courses in accordance with the following:

1. Either Classics 1120 and 1121 or Classics 1130 and 1131;
2. at least 3 credit hours at the 4000 level;
3. an additional 12 credit hours at the 3000 level or above; and
4. an additional 18 credit hours at any level. With the exception of language courses (Classics $1120,1121,1130,1131$ ), no more than 6 1000-level credit hours may be counted towards the major.
A student is encouraged to consider the Honours or Joint Honours in Classics outlined under Honours Degree.

### 14.3.3.2 Minor in Classics

The Minor program in Classics consists of a minimum of 24 credit hours in Classics courses in accordance with the following:

1. At least 3 credit hours at the 3000 level or above.
2. With the exception of language courses (Classics 1120, 1121, 1130, 1131), no more than 6 1000-level credit hours may be counted towards the minor.

### 14.3.3.3 Joint Major in Classics

As an alternative to a minor, a student may choose to complete a major in Classics and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Classics, 3 fewer credit hours shall be required to fulfill clause 4. of the Major in Classics above.

### 14.3.4 Honours Degree

Students for Honours in Classics are advised to choose their program in consultation with the Department.

### 14.3.4.1 Honours Degree in Classics

The Honours Degree in Classics will include at least 60 credit hours in Classics courses and consist of the following:

1. 12 credit hours in ancient Greek and/or Latin, selected from Classics 1120, 1121, 1130, 1131, 2200, 2300, 3200, and 3300 (Classics 3200 and/or 3300 can be used to meet the 3000 -level requirements in both regulations 1. and 2.);
2. 36 credit hours in Classics at the 3000 and 4000 level, of which at least 9 credit hours must be at the 4000 level, including Classics 4999; and
3. a minimum of 12 additional credit hours at any level in Classics resulting in a total of 60 credit hours. With the exception of language courses (Classics 1120, 1121, 1130, 1131), no more than 6 1000-level credit hours may be counted towards the Honours Degree.

### 14.3.4.2 Joint Honours in Classics

Classics may be combined with another subject to form a Joint Honours program. The Joint Honours Degree in Classics will include at least 45 credit hours in Classics courses and consist of the following:

1. 9 credit hours in ancient Greek and/or Latin, selected from Classics 1120, 1121, 1130, 1131, 2200, 2300;
2. 27 credit hours in Classics at the 3000 and 4000 level, of which at least 6 credits must be at the 4000 level (if a student chooses Classics as the Subject of Specialization in which to write the Honours Essay, Classics 4999 Honours Essay will count towards 3 credit hours at the 4000 -level requirement); and
3. a minimum of 9 additional credit hours at any level in Classics resulting in a total of 45 credit hours. With the exception of language courses (Classics 1120, 1121, 1130, 1131), no more than 61000 -level credit hours may be counted towards the Joint Honours Degree.

### 14.3.5 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Classics, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Classics to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.3.6 Certificate in Ancient Languages

The Department of Classics administers the Certificate in Ancient Languages. Credit hours in Classics may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.4 Computer Science

www.mun.ca/computerscience For Departmental Regulations and Course Descriptions, see Faculty of Science section of the Calendar. The following undergraduate programs are available in the Department of Computer Science:

1. Applied Mathematics and Computer Science Joint Major
2. Computer Internship Option (CIIO)
3. Computer Science Honours (B.A., B.Sc.)
4. Computer Science and Economics Joint Major
5. Computer Science and Geography Joint Honours
6. Computer Science and Geography Joint Major
7. Computer Science and Physics Joint Honours (B.Sc. only)
8. Computer Science and Physics Joint Major (B.Sc. only)
9. Computer Science and Pure Mathematics Joint Honours
10. Computer Science and Pure Mathematics Joint Major
11. Computer Science and Statistics Joint Honours
12. Computer Science and Statistics Joint Major
13. Computer Science (Software Engineering) Honours (B.Sc. only)
14. Major in Computer Science
15. Major in Computer Science (Smart Systems) (B.Sc. only)
16. Major in Computer Science (Visual Computing and Games) (B.Sc. only)
17. Minor in Computer Science

### 14.5 Economics

www.mun.ca/econ

### 14.5.1 Department of Economics Description

Economics, the scientific study of how societies use scarce resources to produce and distribute commodities, is a versatile and flexible discipline. The Department has a strong focus on teaching and applied research. Students graduate with problem-solving skills needed to analyze how individuals (microeconomics) and governments (macroeconomics) can efficiently achieve their objectives, given their constraints. Economics students are trained how to evaluate and predict economic relationships. The discipline draws on and collaborates with the sciences (fisheries, health, environment, petroleum) and other disciplines (business, sociology, history, epidemiology, geography, political science, statistics and mathematics) to deal with a variety of topics, including economic growth, monetary policy fair taxation, regional and municipal economic development, natural resource economics, and the economics of environmental impacts.
The following programs are available in the Department:

1. Major in Economics (B.A. or B.Sc.)
2. Honours in Economics (B.A. or B.Sc.)
3. Honours in Economics (Co-operative) (B.A. or B.Sc.)
4. Minor in Economics
5. Joint Major in Economics (B.A. only)
6. Joint Programs (B.Sc. Only)
7. Joint Program (Go-operative) (B.Sc. Only)
8. Major in Economics (Co-operative) (B.A. or B.Sc.)

Economics course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Economics and are designated by ECON.

### 14.5.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of

Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.5.3 Admission Regulations (B.Sc.)

Students are normally admitted to the B.Sc. Program upon successful completion of 30 credit hours which must include:

1. 6 credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses; and
2. 6 credit hours in Mathematics courses.

### 14.5.4 Major in Economics (B.A. or B.Sc.)

1. Students may major in Economics as part of either a B.A. or a B.Sc program. See the Regulations for the General Degree of Bachelor of Arts and the Degree Regulations for the General Degree of Bachelor of Science, as appropriate.
2. ECON 1010 (or the former ECON 2010) and/or ECON 1020 (or the former ECON 2020) are prerequisites for all other Economics courses except the former Economics 2070.
3. Economics 2550, 3000 and 3010 are prerequisites for all 4000 -level courses.
4. Students shall consult with the Head of the Department or delegate when choosing courses for a Major in Economics.
5. Mathematics 1000 or its equivalent is the prerequisite for Economics 3000, 3010, and 3550.
6. B.A. students who undertake a Major in Economics shall complete Statistics 2500 and at least 39 credit hours in courses in Economics of which:
a. 1010 (or the former 2010), 1020 (or the former 2010), 2550, 3000, 3001, 3010 and 3550 are obligatory
b. Eighteen credit hours shall be chosen from among the various Economics courses in consultation with the Head of the Department or delegate, and will include at least 9 credit hours in courses at the 4000 -level.
C. Students may, with the approval of the Head of the Department or delegate, substitute Statistics 2550 for Statistics 2500 .
7. B.A. students majoring in Economics shall complete a minor of 24 credit hours in one other approved subject, or a second Major in accordance with Regulations for the General Degree of Bachelor of Arts. It is recommended that the Minor or second Major be chosen from the following subjects: Business, Mathematics, Political Science, Statistics, Computer Science, History, Geography, Philosophy, Sociology, or Anthropology.
8. B.Sc. students who undertake a Major in Economics shall complete at least 42 credit hours in courses in Economics of which:
a. 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, and 3010 are obligatory.
b. Six credit hours shall be chosen from either 3550 and 3551 , or 4550 and 4551 .
c. Eighteen credit hours shall be chosen from among the various Economics courses in consultation with the Head of the Department or delegate, and will include at least 9 credit hours in courses at the 4000 -level.
9. B.Sc. students must complete credits from other Science disciplines as follows:
a. Mathematics 1000, 1001, and 2050.
b. Statistics 2550 , or its equivalent, and an additional 3 credit hours of Statistics.
c. Computer Science 1000, and an additional 3 credit hours of Computer Science. With the approval of the Head of the Department or delegate, students may substitute another 1000-level Computer Science course for Computer Science 1000.
d. At least 3 credit hours in an additional science subject other than Mathematics/Statistics, Economics, and Computer Science.

### 14.5.5 Honours in Economics (B.A. or B.Sc.)

1. See the General Regulations for the B.A. (Honours) Degree and the Degree Regulations for the Honours Degree of Bachelor of Science.
2. All students shall consult with the Head of the Department or delegate when choosing courses for an Honours program.
3. All students shall complete all non-Economics courses required of B.A. or B.Sc. Majors, and at least 60 credit hours in courses in Economics, including 1010 (or the former 2010), 1020 (or the former 2020), 2550, and at least 36 credit hours at the 3000 -level or above including 3000, 3001, 3010, 3011, 3550, 3551, 4550 and 4551.
4. Twenty-four credit hours in electives in Economics shall be chosen in consultation with the Head of the Department or delegate, including at least 9 credit hours in courses at the 4000-level. In addition, all Economics Honours students are required to write an essay.

### 14.5.6 Minor in Economics

1. Twelve required credit hours: Economics 1010 (or the former 2010), 1020 (or the former 2020), 3000, 3010.
2. Mathematics 1000 or its equivalent is the prerequisite for Economics 3000, 3010 and 3550.
3. Twelve credit hours in Economics electives of which 3 credit hours must be at the 4000 -level. The 12 credit hours shall be chosen in consultation with the Head of the Department or Delegate.
4. Course prerequisites stipulated in the General Degree regulations and in the course descriptions shall apply to a Minor in Economics

### 14.5.7 Joint Programs

### 14.5.7.1 Bachelor of Arts

As an alternative to a minor in the B.A., a student may choose to complete a major in Economics and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Economics, 3 fewer credit hours shall be required to fulfill clause $6 . \mathrm{b}$. of the Major in Economics above.

### 14.5.7.2 Bachelor of Science

Programs for Joint Majors in Economics and Computer Science, Pure Mathematics, Applied Mathematics or Statistics, and a Joint Major in Statistics and Economics (Co-operative) are found under the heading Joint Program Regulations in the entry for the Faculty of Science.
Students who wish to take a Joint Major in Economics and Computer Science, Mathematics or Statistics must arrange their program in consultation with the heads of the respective departments and comply with the General Regulations for the Majors Degrees.

### 14.5.8 Major in Economics (Co-operative) (B.A. or B.Sc.)

### 14.5.8.1 Economics Co-operative Education Option (ECEO)

This Economics Program is available to full-time Economics majors (B.A. and B.Sc.) only.
The ECEO provides an excellent mutual opportunity for students and employers. Qualified students will obtain rewarding employment experience in fields related to Economics for several months of continuous duration. Students will learn valuable practical skills in an employment situation during their course of study. Furthermore, paid employment will help to defray the cost of their education. The objectives of the Work Term component of the ECEO are embodied in the Work Term descriptions found under Course Descriptions, Economics, Work Terms. The descriptions serve to guide the student and the employer toward achieving these objectives.

## 1. Admission Requirements

a. Admission is competitive and selective. Therefore, prospective students are encouraged to consider an alternate degree program in the event that they are not accepted into the Co-operative program.
b. Applicants should note that it is possible to enter Term 1 only in the Fall semester commencing in September of each academic year. Application forms are available online at www.mun.ca/coop/programs/economics/docs_forms.php or in the Department of Economics.
c. The primary criterion used in reaching decisions on applications for admission is overall academic achievement. Students with weak overall academic records are unlikely to be admitted.
d. To be eligible for admission to Term 1 an applicant must have successfully completed a minimum of 30 credit hours with an overall average of at least 65\% as follows: All applicants must have completed Economics 1010 (or the former 2010), 1020 (or the former 2020); at least 6 credit hours in English (English 1110 is recommended); Mathematics 1000; and 15 credit hours chosen from courses in the Faculties of Humanities and Social Sciences, Business or Science. It is advised that Bachelor of Arts students choose courses which can satisfy the requirements for the Core Program (see Regulations for the General Degree of Bachelor of Arts for these requirements), including courses in a second language. Bachelor of Science applicants must have completed Mathematics 1001.
e. Students who have already completed more than the 30 credit hours that are required for admission to the program may apply for entry into the program with Advanced Standing into a Term beyond Term 1. Students with Advanced Standing will be placed in that term of the program judged to be appropriate considering the number of credit hour
f. Transfer students from other universities will be placed in that term of the program judged to be appropriate considering equivalent credits, as determined by the Department.

## 2. Program of Study

a. Promotion from each Term requires a passing grade in all specified required courses and an overall average of at least $60 \%$ in all courses including electives. A student who fails a required course or fails to maintain the overall average of $60 \%$ will not be promoted to the next term and will be required to withdraw from the program. The student in question may apply for readmission in a subsequent year after passing the specified required course(s) previously failed, or re-establishing the 60\% average.
b. In addition to the 30 credit hours required for admission, students are required to complete a total of 120 credit hours and three Work Terms. Students wishing to change the sequence of the work terms must first consult with the Co-operative Coordinator and receive written approval from the Head of the Department or delegate. Students must complete their program on an academic term
Students are expected to enroll in courses in the academic terms in the sequence order as set out in Table 1 Major in Economics (Co-operative Option) B.A. Academic Course Program or in Table 2 Major in Economics (Co-operative Option) B.Sc. Academic Course Program. Students wishing to change the sequence of the courses and/or reduce the course load required in the academic terms must consult with the Co-op Coordinator and receive written approval from the Head of the Department or delegate. Unspecified credits may be used to fulfill elective requirements only.
c. UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) Classification of Students notwithstanding, students do not require special permission to register for courses while on work terms if the courses are in addition to the prescribed program.
3. Work Term Placement
a. General management of the work terms in the ECEO is the responsibility of Co-operative Education. It is responsible for assisting potential employers to become involved in the program, organizing competitions for Work Term employment, arranging student-employer interviews and facilities, data base management, and for the continual development of employment opportunities. The program coordinator (hereafter referred to as coordinator) is an Academic Staff member who will work with the department to counsel students, visit students on their work assignments and evaluate the work term.
b. Work placement is not guaranteed but every effort is made to ensure that appropriate employment is made available. In the case of students who are required to withdraw from the program, the DCE has no responsibility for placement until they have been readmitted to the program.
c. A student who applies for admission to the co-op program gives permission to the University to provide a copy of the applicant's resume, university transcript and work term evaluations to potential employers.
d. A student who has been accepted to the ECEO program may obtain a work term placement outside of the competition. Such employment positions must be confirmed by the employer, and must be approved by the coordinator.
e. Students are expected to submit, within a month from starting a Work Term, a plan of the intended work that term.
f. Salaries paid to co-operative students are determined by employers based on their internal wage structures, and tend to increase as the student progresses through the program and assumes more responsibility. However, students should not expect the income from work terms to make them completely self-supporting.

## 4. Registration and Evaluation of Performance

a. In Work Terms I, II, and III, students must register for Economics 299W, 399W, and 499W respectively.
b. Student performance evaluations are to be completed by the employer and returned to the coordinator. The Work Term evaluations shall consist of two components:
i. On-the-job Student Performance:

Job performance shall be assessed by the coordinator in consultation with the department using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought. Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
ii. The Work Report:

- Students are required to submit a Work Term report to the coordinator on the first day of final exams.
- Work Term reports shall be evaluated by a faculty member and the coordinator.
- If an employer designates a report to be of a confidential nature, both employer and the coordinator must agree as to the methods to protect the confidentiality of such a report before the report may be accepted for evaluation.
- Reports must contain original work related to the Work Term placement. The topic must relate to the work experience and will be chosen by the student in consultation with the employer. The topic must be approved by the coordinator or a faculty member of the Department of Economics.
Evaluation of the work term will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
The evaluation of the job performance and the work term report are recorded separately on the transcript. Overall evaluation of the work term will result in one of the following final grades being awarded:
- Pass with Distinction: Indicates OUTSTANDING PERFORMANCE in both the work report and the job performance
- Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and the job performanc
- Fail: Indicates FAILING PERFORMANCE in the work report or the job performance.

For promotion from the Work Term, a student must obtain at least a Pass. Students should also refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) of the University.
The grades awarded for each work term will be noted on the transcript of the student.
c. If a student fails to achieve the Work Term standards specified above the student will be required to withdraw from the program. Such a student may reapply to the program after a lapse of two semesters, at which time the student will be required to repeat the Work Term with satisfactory performance before being admitted to any further academic term in the Faculty. A given work term may be repeated only once, and not more than two work terms may be repeated in the entire program.
d. In order to be considered for readmission, students must formally apply for readmission to the program not later than the deadline date specified in Clause b. of the Admission section 1. above
e. A student who withdraws from a Work Term without acceptable cause subsequent to a job placement will be required to withdraw permanently from the Co-operative education program. Students who drop a Work Term without prior approval from both the coordinator and the Head of the Department of Economics, or who fail to honour an agreement to work with an employer, or conduct themselves in such a manner as to cause their discharge from the job will normally be awarded a failed grade for the Work Term in question. Permission to drop a Work Term does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved Work Term in lieu of the one dropped.

### 14.5.9 Honours in Economics (Co-operative) (B.A. or B.Sc.)

### 14.5.9.1 Admission Requirements

See Major in Economics (Co-operative) (B.A. or B.Sc.) Economics Co-operative Education Option (ECEO) and the General Regulations for the B.A. and B.Sc. (Honours) Degrees.

### 14.5.9.2 Program of Study

1. See the General Regulations for the B.A. (Honours) Degree and the Degree Regulations for the Honours Degree of Bachelor of Science.
2. All students shall consult with the Head of the Department or delegate when choosing courses for an Honours program.
3. All students shall complete all non-Economics courses required of B.A. or B.Sc. Majors, and at least 60 credit hours in Economics, including 1010 (or the former 2010), 1020 (or the former 2020), 2550, and at least 36 credit hours at the 3000 -level or above including 3000, 3001, 3010, 3011, 3550, 3551, 4120, 4550 and 4551.
4. Twenty-one credit hours in electives in Economics shall be chosen in consultation with the Head of the Department or delegate, including at least 6 credit hours in courses at the 4000 -level. In addition, all Economics Honours students are required to write an essay.
5. Promotion from each Term requires a grade of $70 \%$ in all specified required courses and an overall average of at least $70 \%$ in all courses including electives. A student who fails a required course or fails to maintain an overall average of $70 \%$ will not be promoted to the next term and will be required to withdraw from the program. The student in question may be eligible from readmission in the subsequent year after passing the specified required course(s) previously failed, or re-establishing the $70 \%$ average. See also UNIVERSITY REGULATIONS - Regulations for the Honours Degree.
6. In addition to the 30 credit hours required for admission, students are required to complete 120 credit hours and three Work Terms. Students wishing to change the sequence of the work terms must first consult with the Co-op Coordinator and receive approval in writing from the Head of the Department or delegate. Students must complete their program on an academic term.
7. Courses shall normally be taken in academic terms in the sequenced order as set out in Table 3 Honours in Economics (Cooperative Option) B.A. Academic Course Program or in Table 4 Honours in Economics (Co-operative Option) B.Sc. Academic Course Program. Students wishing to change the sequence of the courses and/or reduce the course load required in the academic terms must consult with the Co-op Coordinator and receive written approval from the Head of the Department or delegate. Unspecified credits may be used to fulfill elective requirements only.
8. UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Classification of Students notwithstanding, students do not require special permission to register for courses while on work terms if the courses are in addition to the prescribed program.

### 14.5.9.3 Work Term Placement

See Major in Economics (Co-operative) (B.A. or B.Sc.) Economics Co-operative Education Option (ECEO).

### 14.5.9.4 Registration and Evaluation of Performance

See Major in Economics (Co-operative) (B.A. or B.Sc.) Economics Co-operative Education Option (ECEO).
Table 1 Major in Economics (Co-operative Option) B.A. - Academic Course Program

| Term 1 (Fall) |
| :--- | :--- |
| Economics 3000 |
| Economics 3550 |
| Statistics 2550 |
| 6 Credit Hours in Minor, Core and elective courses [see Notes 1. |
| and 2. below] |$\quad$| Work Term II (Spring) |
| :--- |
| Economics 399W |

Notes: 1. Courses specified for admission to and completion of the ECEO only partially satisfy the Core Requirements for the Degree of Bachelor of Arts. Additional Core Requirements are 6 credit hours in a single language other than English. These additional requirements should be completed before and following admission to Term 1 as part of the Minor program and elective components of the degree. Students are reminded that careful planning is necessary to ensure that all Core and Minor requirements are satisfied.
2. A Minor is required for a B.A. degree in Economics.

Table 2 Major in Economics (Co-operative Option) B.Sc. - Academic Course Program

| Term 1 (Fall) <br> Computer Science 1000 <br> Economics 3000 <br> Economics 3550 <br> Statistics 2550 <br> 3 credit hours in elective courses [see Note 1.] | Work Term II (Spring) <br> Economies 399W |
| :--- | :--- |
| Term 2 (Winter) <br> Economics 3001 <br> Economics 3010 <br> Economics 2550 <br> Mathematics 2050 <br> 3 credit hours in elective courses [see Note 1.] |  |
| Work Term 1 (Spring) <br> Economics 299W | Term 5 (Fall) <br> 6 further credit hours in Computer Science courses [see Note 2.] <br> 9 credit hours in elective courses [see Note 1.] |
| Term 3 (Fall) <br> Economics 4550 <br> 3 <br> further credit hours in Economics courses <br> 9 credit hours in elective courses | Work Term III <br> Economics 499W |
| Term 4 (Winter) | Term 6 (Spring) <br> Economics 3011 <br> E further credit hours in Economics courses <br> Economics 4120 |
| Economics 4551 hours in elective courses [see Note 1.] <br> 3 <br> further credit hours in Statistics courses [see Note 2.] <br> 3 credit hours in elective courses [see Note 1.] |  |

Notes: 1. Elective courses should be chosen with reference to the Degree Regulations for the General Degree of Bachelor of Science, since courses specified for admission to and completion of the ECEO only partially satisfy these regulations. In particular note that (1) at least 78 credit hours (26 courses) in Science subjects are required and that (2) at least 3 credit hours in an additional Science subject other than Mathematics/ Statistics, Economics and Computer Science must be included in these Science courses.
2. The Statistics and Computer Science elective courses may both be taken in either Term 4 or 5.

Table 3 Honours in Economics (Co-operative Option) B.A. - Academic Course Program

## Term 1 (Fall)

Economics 3000
Economics 3550
Statistics 2500
6 credit hours in Minor, Core and elective courses [see Notes 1. and 2.]

## Term 2 (Winter)

Economics 3001
Economics 3010
Economics 2550
6 credit hours in Minor, Core and elective courses [see Notes 1. and 2.]

| Work Term I (Spring) | E. |
| :--- | :--- |
| Economics 299W |  |$|$

and 2.]

Work Term II (Spring)
Economics 399W

## Term 4 (Winter)

Economics 3011
Economics 3551
Economics 4120
Economics 4551
3 credit hours in Minor, Core and elective courses [see Notes 1. and 2.]
Notes: 1. Courses specified for admission to and completion of the ECEO only partially satisfy the Core Requirements for the Degree of Bachelor of Arts (Honours). Additional Core Requirements are 6 credit hours in a single language other than English. These additional requirements should be completed before and following admission to Term 1 as part of the Minor program and elective components of the degree. Students are reminded that careful planning is necessary to ensure that all Core and Minor requirements are satisfied.
2. A Minor is required for a B.A. degree (Honours) in Economics.
3. Twenty-one credit hours in electives in Economics shall be chosen in consultation with the Head of Department or delegate, including at least 6 credit hours in courses at the 4000-level. In addition, all Economics Honours students are required to write an essay.

Table 4 Honours in Economics (Co-operative Option) B.Sc. - Academic Course Program

| Term 1 (Fall) <br> Computer Science 1000 [see Note 1] <br> Economics 3000 <br> Economics 3550 <br> Statistics 2550 <br> 3 credit hours in elective courses [see Note 2.] | Work Term II (Spring) Economics 399W |
| :---: | :---: |
| Term 2 (Winter) <br> Economics 3001 <br> Economics 3010 <br> Economics 2550 <br> Mathematics 2050 <br> 3 credit hours in elective courses [see Note 2.] | Term 5 (Fall) <br> 6 further credit hours in Computer Science courses [see Note 4.] 9 further credit hours in Economics courses [see Note 3.] |
| Work Term I (Spring) <br> Economics 299W | Work Term III (Winter) Economics 499W |
| Term 3 (Fall) <br> Economics 4550 <br> 6 further credit hours in Economics courses [see Note 3.] <br> 6 credit hours in elective courses [see Note 2.] | Term 6 (Spring) <br> 6 further credit hours in Economics courses [see Note 3.] 9 credit hours in elective courses [see Note 2.] |
| Term 4 (Winter) <br> Economics 3011 <br> Economics 3551 <br> Economics 4120 <br> Economics 4551 <br> 3 fyrther credit hours in Statistics courses [see Note 4.] |  |

Notes: 1. Another 1000-level Computer Science course may be substituted for Computer Science 1000 with the approval of the Department Head.
2. Elective courses should be chosen with reference to the Degree Regulations for the Honours Degree of Bachelor of Science, since courses specified for admission to and completion of the ECEO only partially satisfy these regulations. In particular note that (1) at least 90 credit hours in Science subjects are required and that (2) at least 3 credit hours in an additional Science subject other than Mathematics/Statistics, Economics and Computer Science must be included in these Science courses.
3. Twenty-one credit hours in electives in Economics shall be chosen in consultation with the Head of Department or delegate, including at least 6 credit hours in courses at the 4000-level. In addition, all Economics Honours students are required to write an essay.
4. Statistics and Computer Science elective courses may both be taken in either Term 4 or 5.

### 14.5.10 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Economics, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120
credit hours, a student may use eligible credit hours in Economics to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Economics courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Economics IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.6 English

www.mun.ca/english

### 14.6.1 Department of English Description

In the Department of English students will encounter ideas, both new and old, and texts, both experimental and traditional. Students will read some of the best works in literature and culture, and will engage in provocative conversations about meaning, literary history, the future, identity, and their place in the world. All of the programs offered by the Department of English are designed to help students to think critically, read closely, and to write effectively. It doesn't matter whether students are pursuing a Major, a Minor, or an Honours degree, as they will find a diverse range of courses taught by highly knowledgeable and dynamic professors.
A Bachelor of Arts in English is one of the most versatile degrees a student can obtain because of the universal creative focus achieved through literary study.
The following undergraduate programs are available in the Department of English:

1. Honours in English
2. Joint Honours in English and Another Major Subject
3. Joint Major in English
4. Major in Communication Studies
5. Major in English
6. Major in English with Specialization in Theatre/Drama
7. Minor in Communication Studies
8. Minor in English

### 14.6.1.1 General Information

1. Students who choose an Honours, Major or Minor degree in English are encouraged to consult with the Head of the Department or the Manager of Academic Programs to receive advice on English course selection.
2. Students wishing to pursue an Honours program in English must apply for admission to the Head of Department through the Office of the Registrar. Admission to the program is in accordance with University Regulations and the Bachelor of Arts (Honours Degree) Regulations. Students are encouraged to apply before or during their fourth semester. It is strongly recommended that students have completed at least five English courses, including English 2000, 2001, and 3200 or 3201 before applying.
3. Programs at the Grenfell Campus contain some courses that are not available in St. John's and students wishing to transfer from the St. John's Campus to the Grenfell Campus may have difficulty in completing their program in a timely manner.
4. Students using ENGL 1020 and 1021 to fulfill the Language Study Requirement are permitted to complete up to an additional 6 credit hours in Department of English Critical Reading and Writing courses at the 1000 level in order to fulfill the Critical Reading and Writing Requirement.

### 14.6.1.2 Course Prerequisites

The following course prerequisites apply to all English courses and programs:

1. All students must complete 6 credit hours in English at the 1000-level as follows: one of English 1090 or 1000, and one of English 1001, 1110, 1191, 1192, 1193.
2. In the case of students whose first language is not English and who take 1020 or the former 1030, that course and one of English $1000,1001,1021,1090,1191,1192,1193$ are prerequisites for all other courses.
3. Normally, no student shall register for any English course at the 3000 level unless the student has already completed at least 3 credit hours in English at the 2000 level.
4. Normally, no student shall register for any English course at the 4000 level unless the student has already completed at least 3 credit hours in English at the 3000 level.

### 14.6.1.3 Courses That Fulfill National or Period Requirements in English Programs

1. Courses can only ever count for 3 credit hours. For example, although English 4271 can satisfy both the American requirement and a 4000 -level requirement, students in an Honours, Joint Honours, or Major in English program, will have to complete another course to satisfy the total number of credit hours required by the program.
2. Courses which consider more than one century or nationality may fulfill the requirement for one or the other but not for both categories.
English course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, English and are designated by ENGL.

### 14.6.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social

Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.6.3 General Degrees

### 14.6.3.1 Major in English

1. Students who choose English as their major subject shall complete at least 36 credit hours in English.
2. Nine of these 36 credit hours must be taken at the 3000 -level or above.
3. Students are strongly encouraged to complete English 2000 and 2001 within their first five semesters.
4. The 36 credit hours shall include:
a. 6 credit hours in English courses at the first-year level;
b. English 2000 and 2001;
c. English 3200 or 3201;
d. 3 credit hours in Canadian literature;
e. 3 credit hours in American literature;
f. 6 credit hours at the 4000 -level; and
g. 9 credit hours in additional English courses.

### 14.6.3.2 Major in English with Specialization in Theatre/Drama

1. In addition to the Major in English defined above, the Department offers an English major with a specialization in theatre/drama.
2. Students who choose an English major with a specialization in theatre/drama shall complete 36 credit hours in English, including:
a. 6 credit hours in courses at the first-year level;
b. English 2000, 2002, 2450, 2451, 4400, 4401;
c. English 3200 or 3201;
d. English 4300 or 4301;
e. one of English 3156, 3171, 3260, 4302; and
f. English 3021 or 3022.

### 14.6.3.3 Minor in English

1. Requirements for the Minor may not be chosen from cross-listed courses when they are conducted by another department.
2. Students who choose to complete a Minor in English shall complete at least 27 credit hours in English as follows:
a. 6 credit hours in courses at the first-yearlevel
b. English 2000; 2001, one of English 2002, 2003, 2004;
c. minimum of 6 credit hours at the 3000 -level or above, including one of English 3200 or 3201 ; and
d. 6 credit hours in additional English courses including at least 3 credit hours in Canadian Literature as outlined under Table 1 English Courses to Fulfill Requirements for the Minor, Major, and Honours Programs in English.

### 14.6.3.4 Joint Major in English

As an alternative to a minor, a student may choose to complete a major in English and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in English, 3 fewer credit hours shall be required to fulfill clause 4.g. of the Major in English above.

### 14.6.3.5 Courses to Fulfill Requirements for the Minor, Major, and Honours Programs in English

Table 1 English Courses to Fulfill Requirements for the Minor, Major, and Honours Programs in English

| Level | Canadian Literature | American Literature | Pre-19th Century | 19th Century | 20th and 21st Century |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2000Level | $\begin{aligned} & 2150,2151, \\ & 2160 \end{aligned}$ | $\begin{aligned} & \text { 2160, 2216, } \\ & \text { 2217, 2218 } \end{aligned}$ |  | 2211 | $\begin{aligned} & \text { 2122, 2150, 2151, 2212, 2811, } \\ & 2813,2815 \end{aligned}$ |
| 3000Level | $\begin{aligned} & 3152,3153, \\ & 3155,3156, \\ & 3157,3158, \\ & 3820,3848 \end{aligned}$ | $\begin{aligned} & 3260,3261, \\ & 3262,3263, \\ & 3265,3848 \end{aligned}$ | 3001, 3002, 3006, 3021, 3022, 3130, 3190, 3819, 3828 | 3152, 3160, 3161, 3172, 3175, 3190, 3710, 3711, 3819, 3830 | $3100,3152,3153,3155,3156$, $3157,3158,3160,3161,3172$, $3175,3190,3260,3265,3711$, $3713,374,3811,3819,3820$, $3830,3843,3844,3848$ |
| $\begin{aligned} & 4000- \\ & \text { Level } \end{aligned}$ | $\begin{aligned} & 4821,4822, \\ & 4850,4851 \end{aligned}$ | 4271, 4272 | 4000, 4010, 4030, 4040, 4041, 4050, 4051, 4210, 4211, 4271, 4500, the former 4501, 4600, 4601 | 4050, 4051, 4060, 4061, 4070, 4271, 4300, the former 4805, 4817, 4821, 4851 | $4070,4071,4080,4101,4272$, $4300,4810,4817,4819,4821$, 4822,4850 |

### 14.6.4 Honours Degrees

### 14.6.4.1 Honours Degree with English as Major Subject

An Honours degree in English is generally required for admission to a graduate program in the discipline.

1. Students who choose to complete an Honours Bachelor of Arts in English must complete 60 credit hours in English courses.
2. At least 36 of these credit hours must be taken at the 3000 -level or above.
3. Courses will be chosen in consultation with the Head of Department.
4. In their final year, all Honours English students will be required to present an Honours Essay (English 4999). The semester before they plan to undertake their Honours Essay, students must receive approval of their chosen topic from the Head of the Department, who will then appoint an appropriate supervisor.
5. Any course that considers more than one national literature or period fulfills only one requirement for the Honours degree in English.
6. No courses at the 4000-level may be chosen from courses offered by another department.
7. The 60 credit hours shall include:
a. 6 credit hours in courses at the 1000 -level;
b. English 2000 and 2001;
c. English 3200 or 3201 ;
d. English 2122 or 3160;
e. English 2160;
f. 3 credit hours in Canadian literature;
g. 3 credit hours in American literature;
h. English 4100 and 4101;
i. English 4900 or 4901;
j. 3 credit hours in pre-19th century literature (excluding 3200 and 3201);
k. 3 credit hours in 19th century literature;

।. English 2600 or 3500 or 3600 ;
m. 12 credit hours in additional English courses, of which 3 credit hours must be at the 3000 -level or above, and 6 credit hours must be at the 4000 -level; and
n. English 4999.

### 14.6.4.2 Joint Honours Degree in English and Another Major Subject

 See Bachelor of Arts (Honours Degree) Regulations.1. A student's program for Joint Honours must be approved by each Head of Department and conform to the Faculty of Humanities and Social Sciences General Regulations for Joint Honours degrees.
2. Students shall complete at least 45 credit hours in English, of which at least 27 credit hours shall be at the 3000 -level or above.
3. English courses at the 4000 -level may not be chosen from those offered by another department.
4. Any course that considers more than one national literature or period fulfills only one requirement for the Honours degree in English.
5. Students will write their Honours Essay for only one of the two departments from which they are taking Joint Honours.
6. The 45 credit hours shall include:
a. 6 credit hours in courses at the first-year level;
b. English 2000 and 2001;
c. English 3200 or 3201;
d. One of English 2122, 2160, or 3160;
e. 3 credit hours in Canadianliterature;
f. English 4100 and 4101;
g. English 4900 or 4901;
h. 3 credit hours in pre-19th century literature (excluding English 3200 and 3201);
i. 3 credit hours in 19th century literature; and
j. 9 credit hours in additional English courses, of which 3 credit hours must be at the 3000 -level and 6 credit hours must be at the 4000-level.

### 14.6.5 Major and Minor in Communication Studies

The Major and Minor in Communication Studies are administered by the Department of English
The Major and Minor in Communication Studies draws upon a variety of disciplines to provide students with a critical understanding of the role media and communication technologies play in culture and society. Courses focus on the analysis of media and communication technologies, the mass circulation of ideas and information, the relationship between communication and society, and the transformation of mass forms of popular culture. In addition to exploring the historical developments of media and communication, these programs introduce students to emerging theoretical and methodological approaches to the study of contemporary media. Core courses in Communication Studies provide students with knowledge of key traditions in communication studies and cover a series of critical themes that are intended to guide students throughout the program.
Communication Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, English, Communication Studies and are designated by CMST.

### 14.6.5.1 Advising

Due to the nature of interdisciplinary programming, students must carefully plan their course selection and regularly consult with the program's designated academic advisor. Questions about the delivery of a course should be directed to the appropriate academic unit. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/ liaisons.php.

### 14.6.5.2 Declaring the Major or Minor in Communication Studies

Students wishing to declare a Major or Minor in Communication Studies shall consult with the program's designated academic advisor to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 14.6.5.3 Regulations for the Major in Communication Studies

A Major in Communication Studies consists of all of the requirements of the Bachelor of Arts program, including a minimum of 36 credit hours in courses in Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major in Communication Studies below, as follows:

1. 18 credit hours in courses designated as Communication Studies, including 2000, 2001, 3000, 4000; and
2. 18 additional credit hours chosen from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major in Communication Studies. This may include up to 6 credit hours in non-Communication Studies courses eligible for the Certificate in Film Studies chosen from Table 1 Faculty of Humanities and Social Sciences Courses for the Certificate in Film Studies.
3. Of the 36 total credit hours, a minimum of 15 must be at the 3000 level or above, including at least 6 credit hours at the 4000 level. A student is expected to enroll in the Communication Studies section of any applicable crosslisted courses.
As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, students completing a Major in Communication Studies are ineligible for an interdisciplinary Minor in any program. Credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements all three of a Major, diploma and certificate.

### 14.6.5.4 Regulations for the Minor in Communication Studies

Students who choose to complete a Minor in Communication Studies must complete at least 24 credit hours in Communication Studies as follows:

1. CMST 2000; 2001; 3000; 4000;
2. 3 credit hours chosen from: CMST 2813, 3010-3020, 3816, 3913, 4001, 4010-4020, or 4402; and
3. 9 credit hours in additional Communication Studies courses from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major and Minor in Communication Studies.
4. A minimum of 9 credit hours must come from the 3000 level or above.

### 14.6.5.5 Course List



Not all courses are necessarily offered each year. Students must be careful not to register for different designations of the same course that is cross-listed with different departments. Normal departmental prerequisites for courses are applicable.

Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major and Minor in Communication Studies

| $\mathbf{1 0 0 0}$ and 2000 Level Courses | $\mathbf{3 0 0 0}$ Level Courses | 4000 Level Courses |
| :--- | :--- | :--- |
| CMST 2000, 2001 | Anthropology 3630 or Sociology 3630 | CMST 4000, 4001, 4002, 4010-4020, 4402 |
| CMST 2813 or English 2813 | CMST 3000, 3001 | or the former English 4402 |
| Linguistics 1100 | CMST 3010-3020 | Sociology 4107 |
| Philosophy 2140 or the former 2582 | CMST 3816 or the former English 3816 |  |
| Philosophy 2360 or the former 3620 | CMST 3913 or English 3913 |  |
| Religious Studies 2812 | English 3843, 3912 |  |
| Sociology 2210 | Folklore 3612, 3930 |  |

### 14.6.5.6 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS. Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, candidates for a Major in Communication Studies will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000level or above which may be applied to the major or minor program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program. These "grandparented" students are encouraged to consult the program's designated academic advisor for assistance with course selection.
In the case of departmental regulations for a major or minor, a student will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000 level or above which may be applied to the major or minor program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program.

### 14.6.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in English, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in English to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider English courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in English IS courses may be used towards the International Studies (IS) Courses Requirement. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/ hss/about/contact/liaisons.php.

### 14.6.7 Diploma in Creative Writing

The Department of English administers the Diploma in Creative Writing. Credit hours in English may be eligible to jointly fulfill requirements of a degree and a diploma. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.6.8 Former Diploma in Performance and Communications Media

The Department of English administers the Diploma in Stage and Screen Technique. Credit hours in English may be eligible to jointly fulfill requirements of a degree and a diploma. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.6.9 Certificate in Film Studies

The Department of English administers the Certificate in Film Studies. Credit hours in English and Communications Studies may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.7 English as a Second Language

www.mun.ca/es
English as a Second Language course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, English as a Second Language.
The English as a Second Language Office, affiliated with the Department of English, and under the auspices of the Faculty of Humanities and Social Sciences, offers year-round programs for adult students wishing to improve their English language skills and learn about Canadian culture. These include:

1. A five-week intensive English Language Summer School program;
2. English language preparation for students enrolled in graduate programs such as the Master's in Business Administration and Master's of Engineering;
3. Tutorials, workshops, and conversation programs for current Memorial University of Newfoundland students in undergraduate and graduate degree programs;
4. Custom-designed language and culture programs for schools, universities, or businesses. These can be developed on contract and are either for general learning purposes or to suit the needs of specific disciplines or professions; and
5. Twelve-week non-credit Intensive English Programs which are offered year-round on a semesterized basis.

Information regarding the above services is available from the Director of English as a Second Language Programs at Memorial University of Newfoundland. Information regarding the Intensive English Programs is provided below.

### 14.7.1 Intensive English Program

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Memorial University of Newfoundland's full-time, non-credit Intensive English Program (IEP) is designed to improve English language skills for academic, professional and personal purposes. Reading, writing, speaking and listening skills are covered, and workshops on culture and social activities promoting integration with the local community also form part of the program.
The IEP is offered at intermediate to advanced levels in each of the Fall, Winter, and Spring terms. The program consists of two required courses: English as a Second Language 011F, Core Intensive English, and English as a Second Language 012F, Speaking, Listening, and Culture. Students admitted to the IEP must normally register for both courses each semester.
Students wishing to complete the Intensive English Program in preparation for admission to Memorial University of Newfoundland as undergraduate degree students may apply for this program at the same time as they apply for admission to undergraduate studies. Subject to General Academic Regulations (Undergraduate), Admission/Readmission to the University (Undergraduate), governing admission for undergraduate studies, and the regulations in place for admission to specific programs, students may be provisionally admitted for studies at an undergraduate level in an upcoming term if they are currently enrolled in the Intensive English Program. The General Academic Regulations (Undergraduate), Admission/Readmission to the University (Undergraduate), governing Admission/Readmission to this University, also contained in this Calendar, should be reviewed carefully by students as well.
Final admission for provisionally admitted students will be subject to successful completion of the Intensive English Program with an acceptable score on the Canadian Academic English Language (CAEL) Assessment. The CAEL Assessment is administered as part of the Intensive English Program at the end of each semester. Students enrolled in the Intensive English Program may be considered for enrolment in the Intensive English Bridge Program under the conditions described as the Admission requirements for that program.
Students at any level in the program may take the CAEL Assessment at the end of the semester. The number of semesters of Intensive English study required to achieve a student's desired level of proficiency will vary according to the student's initial proficiency level and individual progress rate.

### 14.7.1.1 Admission Requirements

Applicants to the Intensive English Program:

1. must be at least 18 years old, and
2. must hold a valid high school diploma, and
3. should have an elementary level of English proficiency.

Applications for the Intensive English Program are available at www.mun.ca/esl.

### 14.7.1.2 Program Requirements

1. Full participation is an essential part of the language learning process in this program. For this reason regular attendance is required. No more than $10 \%$ of instructional days may be missed without documented reasons that are acceptable to the Director of English as a Second Language programs. Students who fail to meet the minimum attendance requirements may not be permitted to re-enroll in the IEP in the following semester.
2. Evaluation of students may include, but not be limited to, any or all of the following: projects, assignments, quizzes, oral presentations, and class participation.

### 14.7.2 Intensive English Bridge Program (IEBP)

The Intensive English Bridge Program (IEBP) is intended for applicants to Memorial University of Newfoundland who have been provisionally admitted as undergraduate students and who are students in the advanced level of the Intensive English Program (IEP). It requires ten to fifteen hours of classroom language instruction in reading, writing, grammar, and listening. The emphasis is on English for Academic Purposes. Students in this program may register concurrently for an undergraduate credit course pre-determined by the Director of English as a Second Language Programs.

### 14.7.2.1 Admission

Students for the Intensive English Bridge Program must have:

1. been provisionally accepted to undergraduate studies at Memorial University of Newfoundland;
2. achieved an average of Band 40 in the CAEL with a Writing sub-score of at least 40 , a paper-based TOEFL score of 520 , a
computer-based TOEFL score of 190, an iBT TOEFL score of 68 , or an IELTS score of 5.5 with no sub-score less than 5 ; and
3. achieved a grade of " C " or better with a satisfactory attendance level $(90 \%)$ in both ENGS 011 F and ENGS 012F if enrolled in the Intensive English program in the previous semester.
A student may be considered as a candidate for the Intensive Bridge Program under the following conditions:

### 14.7.2.2 Program Requirements

1. Students admitted to the Intensive English Bridge Program must register for the course English as a Second Language 011F.
2. Students in this program may normally register for no more than one credit course, pre-determined by the Director of English as a Second Language Programs.
3. Students may register in the Intensive English Bridge Program for a maximum of two semesters.
4. Full participation is an essential part of the language learning process in this program. For this reason regular attendance is required. No more than $10 \%$ of instructional days may be missed without documented reasons that are acceptable to the Director of English as a Second Language programs. Students who fail to meet the minimum attendance requirements may not be permitted to re-enroll in the IEBP in the following semester.

### 14.8 Folklore

www.mun.ca/folklore
The discipline of Folklore is a diverse examination of informal culture. Its subjects include stories, music, dance, drama, architecture material culture, celebrations and patterns of belief, as well as customs related to work, leisure, childhood, family, aging, individuality and community.
Folklore explores these customs as dynamic relationships between old ideas and new, individual creation and collective acceptance, local and global influences. And because folklore concerns the everyday, intimate practices of people, ethnographic field research is a vital part of its practice.
Folklore course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Folklore and are designated by FOLK.

### 14.8.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.8.2 General Degree

Folklore 1000 is the prerequisite for all other courses in Folklore, except Folklore 1050, Folklore 1060, and those courses cross-listed with other Departments.

### 14.8.3 Major in Folklore

A student registered to major in Folklore must take a minimum of 36 credit hours in courses as follows:

1. 18 required credit hours: 1000 (or the former 2000), $2100,2300,2401,2500,4470$;
2. 6 credit hours from Group A Folk Literature Genres: 3100, 3200, 3250, 3300, 3450, 3612, 3618;
3. 6 credit hours from Group B-Folklife Genres: 3001, 3350, the former 3591, 3606, 3650, 3700, 3713, 3820, 3830, 3850, 3860, 3870, 4460; and
4. 6 credit hours from Group C - Topics: not more than 3 of which can be taken from courses at the 1000 level: 1060, 2230,2700 , $3350,3360,3460$, the former $3591,3601,3613,3618,3700,3714$, the former $3900,3910,3920,3930,3950,4015,4100,4310$, 4400, 4410, 4420, 4440, 4480, 4810.
Students who declare a major in Folklore should have completed Folklore 1000 (or the former 2000); it is recommended that students intending to major in Folklore take Folklore 2100 as early in their programs as possible.
All students who major in Folklore will be assisted by a faculty advisor who will help them in planning their academic program. Consequently, it is essential that students consult with the Department at an early stage in their studies.

### 14.8.4 Minor in Folklore

A student declaring a minor in Folklore must take a minimum of 24 credit hours including:

1. 15 required credit hours: 1000 (or the former 2000), 2100, 2300, 2401, 2500; and
2. 9 additional credit hours in Folklore - not more than 3 of which can be taken from courses at the 1000 level.

Students who declare a minor in Folklore should have completed Folklore 1000 (or the former 2000); it is recommended that students intending to minor in Folklore take Folklore 2100 as early in their programs as possible.

### 14.8.5 Joint Major in Folklore

As an alternative to a minor, a student may choose to complete a major in Folklore and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Folklore, 3 fewer credit hours shall be required from any one of Group A (Folk Literature Genres), Group B (Folklife Genres) or Group C (Topics) to fulfill the Major in Folklore above.

### 14.8.6 Honours Degree in Folklore

See General Regulations for Honours Degree. An Honours student in Folklore must complete a minimum of 60 credit hours, which must include at least 36 credit hours at the 3000 -level or above, and including the 36 as prescribed for the Major in Folklore. The remaining courses will normally include one of the following options:

1. Folklore 400X
2. Folklore 4998
3. Folklore 4999

### 14.8.7 Joint Honours Degree in Folklore and Another Major Discipline

See General Regulations for Honours Degrees. A minimum of 84 credit hours in the two subjects selected, with the approval of the Heads of both Departments, is required.
Of the credit hours required in the two subjects selected, not fewer than 42, and not more than 51, must come from each discipline. The student may choose the discipline in which to complete the Honours Essay or the Comprehensive Examination. If the student chooses the 400X option, the Folklore component will consist of the major in Folklore plus 400X, for a maximum of 51 credit hours in Folklore. Students are advised to choose an option as soon as possible after declaring the second subject of the Joint Honours degree.

### 14.8.8 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Folklore, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Folklore to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Folklore courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Folklore IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.8.9 Certificate in Newfoundland and Labrador Studies

The Department of Folklore administers the Certificate in Newfoundland and Labrador Studies. Credit hours in Folklore may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.9 Gender Studies

www.mun.ca/genderstudies

### 14.9.1 Department of Gender Studies Description

Gender Studies is an academic area of study that critically examines how gender shapes our identities, our social interactions and our world. Through exposure to interdisciplinary perspectives, students develop frameworks for thinking about power relations and the ways that those relations are shaped and challenged by intersecting constructions of gender, race, class, sexuality, ability, age and nationality. Gender Studies examines everyday experiences, social and political institutions, literary and philosophical contributions, and historical and contemporary issues and events. The discipline provides students with tools to engage with and critically analyze these areas.
The following undergraduate programs are available in the Department of Gender Studies:

1. Major in Gender Studies
2. Minor in Gender Studies

Gender Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Gender Studies and are designated by GNDR.

### 14.9.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.9.3 Major Program Regulations

Students who undertake a Major in Gender Studies must complete a minimum of 36 credit hours in Gender Studies, including:

1. 6 credit hours in Gender Studies 1000 and 1005;
2. 6 credit hours at the 2000 level including Gender Studies 2006;
3. 12 credit hours at the 3000 level including Gender Studies 3005 or Gender Studies 3025, and Gender Studies 3008;
4. 6 credit hours at the 4000 level including Gender Studies 4001; and
5. 6 additional credit hours at the 2000 level or above.

Students declaring a major in Gender Studies are expected to have completed at least 9 credit hours in Gender Studies courses at the 1000 and 2000 level before registering in courses at the 3000 level, and 3 credit hours at the 3000 level before registering in a course at the 4000 level. Students should pay particular attention to necessary prerequisites when scheduling courses.

### 14.9.4 Minor Program Regulations

Students who minor in Gender Studies must complete a minimum of 24 credit hours in Gender Studies including:

1. 3 credit hours in Gender Studies 1000;
2. 6 credit hours at the 2000 level including Gender Studies 2006;
3. 9 credit hours at the 3000 level including Gender Studies 3005 or Gender Studies 3025, and Gender Studies 3008;
4. 3 credit hours at the 4000 level; and
5. 3 additional credit hours at the 2000 level or above.

Students declaring a minor in Gender Studies are expected to have completed at least 6 credit hours in Gender Studies courses at the 1000 and 2000 level before registering in courses at the 3000 level, and 3 credit hours at the 3000 level before registering in a course at the 4000 level. Students should pay particular attention to necessary prerequisites when scheduling courses. Prerequisites may be waived at the discretion of the instructor.

### 14.9.5 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Major or Minor in Gender Studies, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Gender Studies to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Gender Studies courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Gender Studies IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.9.6 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS - Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, students for the Major or Minor in Gender Studies will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000 level or above which may be applied to the Major or Minor Program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program. These "grandparented" students are encouraged to consult the program's designated academic advisor for assistance with course selection.

### 14.10 Geography

www.mun.ca/geog

### 14.10.1 Department of Geography Description

Geography focuses on people, environments, and their interactions from local to global scales, integrating numerous physical and social sciences. As a spatial discipline, geographers study distributions and relationships among all natural and human features of Earth: climate, landscapes, populations, resources, and communities. Key questions that interest us include: Are we using resources sustainably? What are the impacts of changing environments on communities? How can we interpret the spatial distribution of economic, political and social activity? Memorial University of Newfoundland's Geographers are planners, researchers, educators, and decision makers focused on questions relevant to all life on Earth.
The following undergraduate programs are available in the Department of Geography:

1. Major in Geography (B.A. or B.Sc.)
2. Honours in Geography (B.A. or B.Sc.)
3. Minor in Geography
4. Joint Programs
5. Focus Area in Geography
6. Diploma in Geographic Information Sciences

Geography course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Geography and are designated by GEOG.

### 14.10.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.10.3 Major in Geography (B.A. or B.Sc.)

1. Students may complete a Major in Geography as part of either a B.A. or B.Sc. program. See the Regulations for the General Degree of Bachelor of Arts and Degree Regulations for the General Degree of Bachelor of Science as appropriate.
2. All students who major in Geography shall consult with their assigned faculty advisor, or the Head of the Department, who will help them in planning their academic program. For this purpose, it is essential that students declare their major at an early stage of their studies.
3. The Major in Geography consists of 45 credit hours in Geography courses including:
a. 1050;
b. $2001,2102,2195,2302,2425$;
c. 3222;
d. 3228 ; or the former 2226 and 3226 ;
e. 9 additional credit hours from courses at the 3000-level;
f. 490A and 490B;
g. at least 6 additional credit hours chosen from courses at the 4000 -level; and
h. further credit hours in courses at the 3000 -level or above, to fulfil the required 45 credit hours in Geography courses.
4. B.Sc. students must complete 15 credit hours in science courses outside Geography at the 2000-level or above.

### 14.10.4 Honours in Geography (B.A. or B.Sc.)

1. Students intending to take an Honours degree in Geography must apply for entry to the Honours program through the Office of the Registrar.
2. Students accepted in the Honours program must:
a. comply with the Regulations for the Honours Degree of Bachelor of Arts or Degree Regulations for the Honours Degree of Bachelor of Science as appropriate; and
b. arrange their program in consultation with the Head of the Department.
3. For the Honours Degree, a student will be required to have completed at least 60 credit hours in courses in Geography, including:
a. 45 credit hours in courses as listed under Major in Geography;
b. Geography 3230, 490A, 490B, and 4999; and
c. 6 additional credit hours at the 4000 -level.

### 14.10.5 Minor in Geography

The Minor in Geography consists of 24 credit hours in Geography courses, including:

1. 1050, 2001, 2102, 2195, 2302, 2425; and 6 credit hours in electives taken from Geography courses at the 3000 - or 4000 -level, or
2. the former 1000 and 1001, or 1010 and $1011 ; 2001,2102,2195,2302,2425$; and 3 credit hours in electives taken from Geography courses at the 3000- or 4000 - level.

### 14.10.6 Joint Programs

Regulations for the Joint Honours in Computer Science and Geography, Joint Honours in Geography/Earth Sciences, and Joint Major in Computer Science and Geography are found under the heading Joint Program Regulations in the entry for the Faculty of Science.
Students who wish to take a Joint Major or a Joint Honours in Geography and another subject must arrange their program in consultation with the heads of the Departments concerned, and comply with the General Regulations of the appropriate Faculty.

### 14.10.6.1 Bachelor of Arts

As an alternative to a minor in the B.A a student may choose to complete a major in Geography and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. The joint major in Geography requires completion of Geography 1050, 2001, $2102,2195,2302,2425,3222,3228,490 \mathrm{~A}, 490 \mathrm{~B}, 9$ additional credit hours at the 3000 -level, and 6 additional credit hours at the 4000level.

### 14.10.6.2 Bachelor of Science

Regulations for the Joint Honours in Computer Science and Geography, Joint Honours in Geography/Earth Sciences, and Joint Major in Computer Science and Geography are found under the heading Joint Program Regulations in the entry for the Faculty of Science.
Students who wish to take a Joint Major or a Joint Honours in Geography and another subject must arrange their program in consultation with the heads of the Departments concerned, and comply with the General Regulations of the appropriate Faculty.

### 14.10.7 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Geography, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Geography to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Geography courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Geography IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.10.8 Focus Area in Geography - Bachelor of Education (Primary/Elementary)

The focus area in Geography is applicable only to the Bachelor of Education Primary/Elementary degree programs offered by the Faculty of Education. See Focus Areas under the Faculty of Education for program details.

### 14.10.9 Diploma in Geographic Information Sciences

The Department of Geography administers the Diploma in Geographic Information Sciences. Credit hours in Geography may be eligible to jointly fulfill requirements of a degree and a diploma. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.11 History

## www.mun.ca/history

### 14.11.1 Department of History Description

History is the study of past societies through the critical examination of available evidence including texts, words and objects. The Department of History offers students the opportunity to study both the distant and recent past by exploring a variety of different topics and themes. The analytical skills integral to studying history - essentially how people interacted with one another and their built and natural environments - provide students with opportunities to develop critical thinking and writing proficiencies in addition to an appreciation of past cultures and societies.
History course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, History and are designated by HIST.
The following programs are offered in the Department of History:

1. Major in History
2. Minor in History
3. Joint Major in History
4. Honours in History

### 14.11.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.11.3 General Degree

1. Students should consult the Regulations for the General Degree of Bachelor of Arts in addition to the regulations listed below.
2. Any one of History 1005, 1009-1015 forms the introduction to the practice of history. Third and fourth-year students taking History courses as electives or to satisfy Regulations for the General Degree of Bachelor of Arts are encouraged to enrol in the Department's second-year courses.
3. All students who major in History will be assisted by a faculty advisor who will help them in planning their academic programs. It is essential that students register with the Department at an early stage of their studies.

### 14.11.3.1 Major in History

Students who undertake a Major in History must complete 36 credit hours in History, including:

1. 3 credit hours in a course beginning with the initial digit ' 1 '. Only one first-year course may be used to meet the Major requirements in History. However, a Major may use subsequent first-year History courses as Humanities and Social Sciences electives for the B.A.;
2. at least 12 credit hours in courses with the initial digit ' 2 ' including either History 2200 or 2210;
3. at least 9 credit hours in courses with the initial digit ' 2 ' should be completed before registering in a course with the initial digit ' 3 '. Students should pay particular attention to necessary prerequisites when scheduling courses. In addition, students should obtain advice on the appropriate courses from their faculty advisor;
4. at least 9 credit hours in courses with the initial digit ' 3 ' including History 3840;
5. History 3840 for which there is a prerequisite of 12 credit hours in History;
6. at least 3 credit hours in courses with the initial digit ' 3 ' should be completed before registering in a course with the initial digit ' 4 ';
7. at least 6 credit hours in courses with the initial digit ' 4 '. Some fourth-year courses may require completion of courses in the same topic/subject area. Prerequisites may be waived at the discretion of the instructor; and
8. 6 additional credit hours in courses with an initial digit beyond ' 1 '.

No more than 15 transfer credit hours in History may be used to fulfill the requirements for a Major in History.

### 14.11.3.2 Minor in History

Students who undertake a Minor in History must complete 24 credit hours in History, including:

1. 3 credit hours in a course beginning with the initial digit ' 1 '. Only one first-year course may be used to meet the Minor requirements in History. However, a Minor may use subsequent first-year History courses as Humanities and Social Sciences electives for the B.A.;
2. at least 9 credit hours in courses with the initial digit ' 2 ';
3. at least 6 credit hours in courses with the initial digit ' 2 ' should be completed before registering in a course with the initial digit ' 3 ';
4. at least 6 credit hours in courses with the initial digit ' 3 ';
5. at least 3 credit hours in courses with the initial digit ' 4 '. Some fourth-year courses may require completion of courses in the same topic/subject area. Prerequisites may be waived at the discretion of the instructor; and
6. 3 additional credit hours in courses with an initial digit beyond ' 1 '.

No more than 9 transfer credit hours in History may be used to fulfil the requirements for a Minor in History.

### 14.11.3.3 Joint Major in History

As an alternative to a minor, a student may choose to complete a major in History and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the Joint Major in History, 3 fewer credit hours shall be required in courses at the 2000 -level or $3000-$ level. Normal requirements to complete History 2200 or 2210 and 3840 shall continue to apply.

### 14.11.4 Honours Degree

The Honours Degree in History is a rigorous and rewarding program of study for History Majors interested in developing a piece of independent research and writing. Honours students in History develop many of the necessary skills and preparation for graduate school, law school, or work in the heritage sector.

1. Students intending to take an Honours Degree with a Major in History must comply with the Regulations for the Honours Degree of Bachelor of Arts.
2. Students are required to complete at least 60 credit hours in History according to the following pattern, of which there must be a minimum of 36 credit hours at the 3000 -level or above:
a. 36 credit hours chosen in accordance with the pattern set out under the Major in History above; and
b. 12 additional credit hours in History electives beyond the first-year level and 12 credit hours in Honours courses: History 4800, 4821, 4822, and 4999.
3. Applicants must apply by June 30th for the Fall semester and by November 1st for the Winter semester in order to be considered for admission. Applications received after June 30th will be considered for the Winter semester and applications received after November 1st will be considered for the next Fall semester. Students intending to complete an Honours degree in History will be assisted by a faculty advisor in planning their academic programs. The academic programs for Honours students must be approved by the Head of the Department or delegate.
4. Students electing Joint Honours are required to complete at least 51 credit hours in History according to the following pattern:
a. 36 chosen in accordance with the pattern set out under the Major in History above;
b. History 4800 and 4821 ;
c. 3 additional credit hours in History electives beyond the first-year level; and
d. if the student chooses to write the Honours Essay in History, the student must complete History 4822 and History 4999; or
e. if the student chooses to write the Honours Essay in another Department, the student does not need to complete History 4822 and History 4999. However, these courses must be replaced with 6 additional credit hours in History electives at the third-year level or above.
5. The minimum grades required are:
a. $70 \%$ on each of the prescribed courses beyond the first-year level or an average of $75 \%$ on those courses; and
b. $70 \%$ or higher in History 4999.
6. No more than 27 transfer credit hours may be included in the minimum 60 credit hours required for the Honours degree in History.

### 14.11.5 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of an Honours, Major or Minor in History, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in History to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider History courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in History IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.12 Linguistics

www.mun.ca/linguistics

### 14.12.1 Department of Linguistics Description

Linguistics is the scientific study of language, including language structure, language variation, language change, the development of language and the psychology and biology of language.
The Department of Linguistics prides itself on maintaining strong links between teaching and research, with emphasis on data-driven, theoretically informed inquiry into aboriginal languages, language variation and change and language acquisition. Students are invested into the community of linguistic scholars through active engagement in primary research, supported by unique and extensive in-house data archives, broad library holdings and state-of-the-art labs and analytical tools. Strong relations with robust local speech communities enhance our research and our teaching. Memorial University of Newfoundland's Department of Linguistics is the only department of Linguistics in Atlantic Canada, and the largest department east of Quebec City.
The following undergraduate programs are offered in the Department of Linguistics:

1. Major in Linguistics
2. Minor in Linguisties
3. Honours in Linguistics
4. Joint Honours in Linguistics information is under Honours in Linguistics.

In addition to meeting the regulations below, a student must also meet UNIVERSITY REGULATIONS.
Linguistics course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Linguistics and are designated by LING.

### 14.12.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts

General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.12.3 Major in Linguistics

The General Major in Linguistics requires twelve courses, 36 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in Table 1 Suggested Course Sequence for Major in Linguistics in order to proceed smoothly in the program.

1. Students majoring in Linguistics must complete 36 credit hours in Linguistics, which must include either Linguistics 1100 or 1155 and the 12 credit hours $1103,1104,3100,3201$ plus 21 credit hours in courses chosen from Linguistics 1105, 2060, 2210, 2212, 2220, $2300,3000,3104,3105,3150,3155,3210,3302,3310,3311,3500,3850,3950-3960,4010-4091,4100,4110,4150,4151,4203$, 4204,4210 , the former $4400,4420,4421,4500,4700,4750,4751,4752,4753,4754,4900,4901,4950-4960$. Of these 21 credit hours, 9 must be at the 4000 level.
2. Designated Language Study courses offered in Linguistics may not be used towards a Major, Minor, or Honours in Linguistics.
3. In addition to meeting the Major in Linguistics requirements students must also meet the Bachelor of Arts Degree Requirements. A student is encouraged to consider the Honours or Joint Honours in Linguistics outlined under Honours in Linguistics.

Table 1 Suggested Course Sequence for Major in Linguistics

| Year | Required Courses | Recommended Courses | Optional Courses |
| :--- | :--- | :--- | :--- |
| 1 | Linguistics 1100 or 1155, and 1103, <br> 1104 | LING 2210 | LING 1105 <br> one other 2000-level LING course |
| $2-3$ | LING 3100, 3201 | two or three other 3000-level LING <br> courses |  |
| 4 | $3000-$ and 4000- level LING courses |  |  |

With the exception of LING 1100 all other Linguistics courses are offered, other than language courses, during the Fall and Winter semesters only.

### 14.12.4 Minor in Linguistics

The General Minor in Linguistics requires eight courses, 24 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in Table 2 Suggested Course Sequence for Minor in Linguistics in order to proceed smoothly in the program.

1. Students minoring in Linguistics must complete 24 credit hours in Linguistics, which must include: either Linguistics 1100 or 1155 , and both of 1103 and 1104; any 6 credit hours from the following list: Linguistics 3000, 3100, 3104, 3201, 3500, 3850; and an additional 9 credit hours selected from: Linguistics 1105, 2060, 2210, 2212, 2220, 2300, 3000, 3100, 3104, 3105, 3150, 3155, 3201, $3210,3302,3310,3311,3500,3850,3950-3960,4010-4091,4100,4110,4150,4151,4203,4204,4210$, the former 4400,4420 , 4421, 4500, 4700, 4750, 4751, 4752, 4753, 4754, 4900, 4901, 4950-4960.
2. In addition to meeting the Minor in Linguistics requirements students must also meet the Bachelor of Arts Degree Requirements. A student is encouraged to consider the Major or Honours in Linguistics outlined under Major in Linguistics and Honours in Linguistics.

Table 2 Suggested Course Sequence for Minor in Linguistics

| Year | Required Courses | Recommended Courses |
| :--- | :--- | :--- |
| 1 | Linguistics 1100 or 1155, and 1103,1104 |  |
| $2-3$ | two of LING 3000, 3100, 3104, 3201,3850 | one other 2000 or 3000-level LING course |
| 4 | two other LING courses |  |

With the exception of LING 1100 all other Linguistics courses are offered, other than language courses, during the Fall and Winter semesters only.

### 14.12.5 Honours in Linguistics

The Honours in Linguistics requires twenty courses, 60 credit hours and the joint Honours requires sixteen courses, 48 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in Table 3 Suggested Course Sequence for Honours in Linguistics in order to proceed smoothly in the program.

1. In addition to meeting the requirements below students must also meet the Faculty of Humanities and Social Sciences Honours regulations outlined under Bachelor of Arts (Honours) Degree Regulations.
2. An Honours degree in Linguistics must include 60 credit hours in Linguistics courses, including at least 36 credit hours at the 3000 level or above, of which the following are required: either Linguistics 1100 or 1155, and 1103, 1104, 2210, 3000, 3100, 3201, 3210, 3500, 3850, 4100 (or 4110), 4203 (or 4204), 4999, and at least one of Linguistics 4010-4091, 4150, 4151,4210, 4500, 4700, 4750, 4751, 4752, 4753, 4754, 4900, 4901, 4950-4960. Students should choose courses in consultation with their Honours Essay supervisor, to ensure that the needs and interests of the individual student are met, and to take into account the availability of courses which the Department is able to offer.
3. Linguistics may also be combined with another subject or subjects to constitute a Joint Honours degree. The required courses listed above for the Honours degree, except for Linguistics 4999, are also required for any Joint Honours degree in Linguistics. A total of

48 credit hours in Linguistics, which may include Linguistics 4999, is required for Joint Honours in Linguistics. Students should consult their Department of Linguistics advisor to ensure that they select courses which complement their other Honours Subject of Specialization.
4. In addition to meeting the Honours in Linguistics requirements students must also meet the Bachelor of Arts Degree Requirements.

Table 3 Suggested Course Sequence for Honours in Linguistics

| Year | Required Courses | Recommended Courses |
| :--- | :--- | :--- |
| 1 | Linguistics 1100 or 1155, and 1103, 1104, 2210 | one other 2000-level LING course |
| 2 | LING 3000, 3100, 3201, 3210, 3850 | LING 3155 <br> one other 2000 or 3000-level LING course |
| 3 | LING 3500, 4100 (or 4110), 4203 (or 4204) <br> one of 4010-4091, 4150, 4210, 4500, 4700, <br> $4950-4960$ | two other 3000 or 4000-level LING courses |
| 4 | LING 4999 | one other 4000-level LING course |

With the exception of LING 1100 all other Linguistics courses are offered, other than language courses, during the Fall and Winter semesters only.

### 14.12.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Linguistics, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Linguistics to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.13 Mathematics and Statistics

For Departmental Regulations and Course Descriptions, see Faculty of Science section of the Calendar
The following undergraduate programs are available in the Department of Mathematics and Statistics?

1. Applied Mathematics Honours (B.Sc. only)
2. Applied Mathematics Major (B.Sc. only)
3. Applied Mathematics and Chemistry Joint Honours (B.SC. only)
4. Applied Mathematics and Computer Science Joint Major (B.SC. only)
5. Applied Mathematics and Economics Joint Major (B.Sc. only)
6. Applied Mathematics and Physics Joint Honours (B.Sc. only)
7. Applied Mathematics and Physics Joint Major (B.Sc. only)
8. Biology and Statistics Joint Honours (B.Sc. only)
9. Computer Science and Pure Mathematics Joint Honours (B.Sc. only)
10. Computer Science and Pure Mathematics Joint Major (B.Sc. only)
11. Computer Science and Statistics Joint Honours (B.Sc. only)
12. Computer Science and Statistics Joint Major (B.Sc. only)
13. Economics and Pure Mathematics Joint Major (B.Sc. only)
14. Economics and Statistics Joint Major (B.Sc. only)
15. Economics (Co-operative) and Statistics Joint Major (B.Sc. only)
16. Mathematics Minor
17. Pure Mathematics Honours
18. Pure Mathematics Major
19. Pure Mathematics and Statistics Joint Honours (B.Sc. only)
20. Statistics Honours
21. Statistics Major
22. Statistics Minor

### 14.14 Modern Canguages, Literatures and Cultures

www.mun.ca/languages

### 14.14.1 Department of Modern Languages, Literatures and Cultures Description

The Department of Modern Languages, Literatures and Cultures (MLLC) is a multidisciplinary department that is rooted in the traditions of four major European and world languages (French, German, Russian, and Spanish), as well as in Canada's own French language and culture. The Department's mission is to advance the linguistic and cultural competencies of students in one or more modern languages. Mastering another language not only includes speaking and writing proficiency in the target language, but also increasing one's appreciation and critical analysis of the literatures and cultures that share that language. The Department is home to most of the courses offered in the Faculty of Humanities and Social Sciences that study actively spoken languages, including Irish Gaelic, Italian, and Japanese. These complement ancient language courses that are offered principally by the Department of Classics and by the Department of Religious Studies. The Department of Linguistics offers courses in First Nations and Inuit languages.
The following undergraduate programs are offered in the Department of Modern Languages, Literatures and Cultures:

1. French Major
2. French Major for Francophones
3. French Minor
4. French Minor for Francophones
5. Honours Degree in French
6. Joint Major in French and Joint Major in French for Francophones
7. Joint Honours in French
8. Frecker program in French Immersion
9. Canadian Third Year In Nice
10. Université de Bretagne Sud (UBS)
11. German Major
12. German Minor
13. German Studies Minor
14. Joint Major in German
15. Honours Degree in German
16. Russian Language and Literature Major
17. Russian Language and Literature Minor
18. Joint Major in Russian Language and Literature
19. Spanish Major
20. Spanish Minor
21. Joint Major in Spanish

### 14.14.2 French

www.mun.ca/languages
Native speakers of French and students with near-native fluency will not normally receive credit for courses taken at the first year level in their native language nor will they be allowed to challenge for credit at the first year level. Such students shall consult the Department to be placed at the appropriate level.
French course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, French and are designated by FREN.

### 14.14.2.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.14.2.2 French Major Program

Students completing a French Major Program, depending on the student's program and point of entry into the program, may wish to follow Table 1 Course Pattern for Major in French, On-Campus (Entry Point FREN 1500), Table 2 Course Pattern for Major in French, On-Campus (Entry Point FREN 2100, or Table 3 Course Pattern for Major in French, Study-Away Option below.

1. Students who choose French as their Major must complete at least 42 credit hours in French, including:
a. No more than 6 credit hours at the 1000 level. It is strongly recommended that students in the Major program complete Classics 1120 which may be substituted for 3 credit hours in French beyond the first-year level.
b. 2100 and 2101 ;
c. 2300
d. Af least 6 credit hours chosen from 2601, 2602 and 2900;
e. 3100 and 3101 ;
f. At least 6 credit hours chosen from 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508;
g. At least 6 credit hours at the 4000 level; and
h. An extra 3 credit hours at the 2000 level or above
2. Between their first registration at Memorial University of Newfoundland and the time of their graduation, all students majoring in French must have spent at least eight weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment. Students are strongly encouraged to fulfill the requirement early in their program in order to get the greatest benefit from the immersion experience. Students should consult the Head of the Department before the end of their second year of study ( 60 credit hours) for help in selecting the immersion experience most appropriate for their circumstances. Every reasonable effort will be made by the Department to accommodate students who, for personal or professional reasons, need to fulfill the immersion requirement in a different setting. Please note that accommodation cannot include waivers or exemptions from the immersion requirement as completion of the immersion requirement is an academic requirement for all students completing a Major in French. Students with extenuating circumstances should consult with the Head of the Department for alternative options.
3. No more than 12 transfer credit hours may be used to fulfill the minimum requirements of the Major in French as outlined under Transfer Credit for Language Courses.
4. Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.

Table 1 Course Pattern for Major in French, On Campus (Entry Point FREN 1500)

| Term | Course Requirements |
| :--- | :--- |
| Year 1 | 3 credit hours in Critical Reading and Writing (English) |
| First Semester | Elective |
| FREN 1500 |  |
| Minor Subject |  |
| 3 credit hours in Quantitative Reasoning |  |

Table 2 Course Pattern for Major in French, On Campus (Entry point FREN 2100)


Table 3 Course Pattern for Major in French, Study-Away Option

| Term | Course Requirements |
| :---: | :---: |
| Year 1 <br> First Semester | 3 credit hours in Critical Reading and Writing (English) Elective <br> FREN 1501 <br> Minor Subject <br> 3 credit hours in Quantitative Reasoning |
| Year 1 <br> Second Semester | 3 credit hours in Critical Reading and Writing (any) FREN 1502 <br> Minor Subject 6 credit hours in Quantitative Reasoning |
| Year 2 <br> Third Semester | Elective <br> FREN 2100 <br> FREN 2300 which can be completed in the following semester FREN 260X or 2900 <br> Minor Subject |
| Year 2 <br> Fourth Semester | Elective <br> Elective <br> FREN 2101 <br> FREN 260X or 2900 <br> Minor Subject |
| Year 3 <br> Fifth Semester | Elective or FREN Elective or FREN <br> FREN 3100 <br> FREN 350X <br> Minor Subject |
| $\begin{aligned} & \text { Year 3 } \\ & \text { Sixth Semester } \end{aligned}$ | Elective or FREN Elective or FREN <br> FREN 3101 <br> FREN 350X <br> Minor Subject |
| Year 4 <br> Seventh Semester | Elective or FREN Elective or FREN <br> FREN 4XXX <br> FREN 4XXX <br> Minor Subject |
| Year 4 <br> Eighth Semester | Elective or FREN Elective or FREN Elective or FREN FREN 4XXX |

The Study-Away Option may include a summer bursary program. Information regarding bursary programs is available at www.ed.gov.nl.ca/edu/k12/french/bursaries.html.

### 14.14.2.3 French Minor Program

1. Students who choose French as their Minor must complete at least 24 credit hours in French, including:
a. 2100 and 2101
b. 3100 or 3101
2. No more than 6 credit hours at the 1000 level may be used to fulfil the minimum requirements of the Minor in French.
3. Between their first registration at Memorial University of Newfoundland and the time of their graduation, all students minoring in French must have spent at least four weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment. Students are strongly encouraged to fulfill the requirement early in their program in order to get the greatest benefit from the immersion experience. Students should consult the Head of the Department before the end of their second year of study ( 60 credit hours) for help in selecting the immersion experience most appropriate for their circumstances. Every reasonable effort will be made by the Department to accommodate students who, for personal or professional reasons, need to fulfill the immersion requirement in a different setting. Please note that accommodation cannot include waivers or exemptions from the immersion requirement as completion of the immersion requirement is an academic requirement for all students completing a Minor in French. Students with extenuating circumstances should consult with the Head of the Department for alternative options.
4. No more than 6 transfer credit hours may be used to fulfill the minimum requirements of the Minor in French as outlined under Transfer Credit for Language Courses.

### 14.14.2.4 Honours Degree in French

In addition to the following regulations students are advised to see the General Regulations for Honours Degrees.

1. An Honours degree in French shall consist of at least 60 credit hours in French, including:
a. no more than 6 credit hours at the 1000 level. However, Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.
b. 2100 and 2101;
c. 2300 ;
d. at least 6 credit hours chosen from 2601, 2602 and 2900;
e. 3100 and 3101 ;
f. at least 6 credit hours chosen from $3500,3501,3502,3503,3504,3506,3507,3508$;
g. a minimum of 15 credit hours at the 4000 level including French 4900 and 4999; and
h. an extra 6 credit hours at the 2000 level or above.
2. Between their first registration at Memorial University of Newfoundland and the time of their graduation, all students completing the Honours program in French must have spent at least two semesters at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment. Students are strongly encouraged to fulfill the requirement early in their program in order to get the greatest benefit from the immersion experience. Students should consult the Head of the Department before the end of their second year of study ( 60 credit hours) for help in selecting the immersion experience most appropriate for their circumstances. Every reasonable effort will be made by the Department to accommodate students who, for personal or professional reasons, need to fulfill the immersion requirement in a different setting. Please note that accommodation cannot include waivers or exemptions from the immersion requirement as completion of the immersion requirement is an academic requirement for all students completing an Honours Degree in French. Students with extenuating circumstances should consult with the Head of the Department for alternative options.
3. No more than 24 transfer credit hours may be used to fulfill the minimum requirements of the Honours program in French as outlined under Transfer Credit for Language Courses.
4. Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.

### 14.14.2.5 Joint Honours

1. French may be combined with any other subject approved in the General Regulations to form a Joint Honours program. Students will establish their program in consultation with the Heads of the Departments of their chosen Honours subjects.
2. The Joint Honours program in French shall include at least 51 credit hours in French including the same requirements as the French Major.
3. Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.
4. By the time of their graduation, all students completing the Joint Honours program in French must have spent at least two semesters at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment.
5. No more than 18 transfer credit hours may be used to fulfil the minimum requirements of the Joint Honours program in French as outlined under Transfer Credit for French Courses.

### 14.14.2.6 Transfer Credit for French Courses

1. Students who successfully complete French language programs offered by recognized universities and colleges in Canada and elsewhere may apply to have their courses evaluated for equivalent Memorial University of Newfoundland credit. To do so, they must follow such procedures as may be specified by the Office of the Registrar; they may also be required to sit a placement test administered by the Department of Modern Languages, Literatures and Cultures. The result achieved on this placement test will influence any determination of the number and level of transfer credits to be awarded.
2. Students intending to participate in a summer language bursary program or the Student Fellowship Programs are particularly advised to consult the Head of the Department of Modern Languages, Literatures and Cultures before beginning such a program. All students intending to request transfer of credit are strongly advised to obtain a Letter of Permission from the Office of the Registrar before registering for any course of study offered by another institution.
3. In any event, no more than 9 transfer credit hours in French at the first-year level, and 18 at the second-year level, may be granted to any student.
4. See specific program regulations for restrictions placed on the maximum number of transfer credit hours applicable to the Minor, Major, Honours and Joint Honours programs. Students who have spent an extended period of time studying French in a francophone milieu may discuss with the Head of the Department the suitability of seeking permission from the Faculty's Undergraduate Waivers and Appeals Committee to transfer up to a maximum of 3 additional credit hours.

### 14.14.2.7 Frecker Program

1. The Frecker Program is a one-semester immersion program offered by Memorial University of Newfoundland in St-Pierre. Students who successfully complete this program will receive 15 credit hours in French as specified in clause 5. below. All students will board with French families and will participate in extra-curricular activities designed to take full advantage of the French milieu.
2. Students wanting to complete the Frecker Program may wish to follow Table 4 Course Pattern for Major in French, Frecker Program (Entry Point FREN 1501) below.
3. The minimum prerequisites for admission to the program are successful completion of French 1502 and permission of the Head of the Department following written application. Admission to the program will be on a competitive basis and will depend on marks obtained in French courses at Memorial University of Newfoundland and on instructors' recommendations.
4. The cost of room and board is partially subsidized by the Federal Government Bursary Program in the case of residents of Newfoundland and Labrador. (A limited number of non-bursary students may be admitted to the program.)
5. Students who are admitted to this program will register for French 2100, 2101, 2300, 2900, and 2602.

Table 4 Course Pattern for Major in French, Frecker Program (Entry Point FREN 1501)


### 14.14.2.8 Canadian Third Year in Nice Program

Memorial University of Newfoundland is a member of a consortium of Canadian universities (with Guelph University, University of Toronto, University of Western Ontario, University of Windsor), which offer the Canadian Third Year in Nice Program. This program enables students to spend a full academic year studying at the Université de Nice-Sophia Antipolis in the South of France. Canadian Students participating in this program are accompanied by a faculty member from one of the Canadian universities participating in the program. This person teaches two of the five courses which students complete each semester in Nice, the other three being chosen from the offerings of the Université de Nice. Specific Memorial University of Newfoundland transfer credits are awarded for successful completion of the courses taught by the Canadian coordinator and specified and/or unspecified credits are awarded for the courses offered by the Université de Nice. All courses completed under this program will be offered outside the normal time frame for courses offered at Memorial University of Newfoundland. Fall semester courses will be completed between October and January each year, Winter semester courses between February and May. This follows the time frame of Sessions I and II at the Université de Nice-Sophia Antipolis. Students should consult the Head of the Department regarding course selection.
L'université Memorial fait partie du consortium des universités canadiennes qui offrent le programme Canadian Third Year in Nice (avec Guelph University, University of Toronto, University of Western Ontario, University of Windsor). Ce programme permet à des étudiants et étudiantes de passer une année académique à l'université de Nice-Sophia Antipolis dans le sud de la France. Les étudiant/e/s canadien/ne/s qui participent à ce programme sont encadrés par un/e professeur/e d'une des universités qui participent à ce programme. Chaque semestre, cette personne enseigne deux cours sur les cinq. Les trois autres cours sont choisis parmi les cours enseignés à l'úniversité de Nice. Les cours de l'enseignant/e canadien/ne donneront droit à des crédits spécifiés, alors que les cours offerts à Nice donneront droit à de transfert crédits spécifiés et/ou non spécifiés. Le calendrier sera différent de celui de l'université Memorial: les cours d'automne auront lieu de septembre à janvier et ceux d'hiver de février à mai, suivant le calendrier des sessions I et II de l'université de Nice-Sophia Antipolis. Les étudiants et étudiantes doivent consulter la direction du département concernant le choix des cours.
Students wanting to complete the Canadian Third Year in Nice Program may wish to follow Table 5 Course Pattern for Major in French, Nice (Entry Point FREN 1501) below.

Table 5 Course Pattern for Major in French, Nice (Entry Point FREN 1501)

| Term | Course Requirements |
| :---: | :---: |
| Year 1 <br> First Semester | 3 credit hours in Critical Reading and Writing (English) Elective <br> FREN 1501 <br> Minor Subject <br> 3 credit hours in Quantitative Reasoning |
| Year 1 <br> Second Semester | 3 credit hours in Critical Reading and Writing (any) Elective <br> FREN 1502 <br> Minor Subject <br> 3 credit hours in Quantitative Reasoning |
| Year 2 <br> Third Semester | Elective <br> FREN 2100 <br> FREN 2300 which can be done in the next semester <br> FREN 260X or 2900 <br> Minor Subject |
| Year 2 <br> Fourth Semester | Elective <br> Elective <br> FREN 2101 <br> FREN 260X or 2900 <br> Minor Subject |
| Year 3 <br> Fifth Semester <br> Third Year in Nice | Elective/FREN (transfer credits) <br> Elective/FREN (transfer credits) <br> Elective/FREN (transfer credits) <br> FREN 3102 (is offered only at the Université de Nice-Sophia Antipolis in France), (FREN 3102 can be substituted for French 3100 for the purposes of French program requirements and as course prerequisites) FREN 3507 (is offered only at the Université de Nice-Sophia Antipolis in France) |
| Year 3 <br> Sixth Semester <br> Third Year in Nice | Elective/FREN (transfer credits) <br> Elective/FREN (transfer credits) <br> Elective/FREN (transfer credits) <br> FREN 3103 (is offered only at the Université de Nice-Sophia Antipolis in France) (FREN 3103 can be substituted for French 3101 for the purposes of French program requirements and as course prerequisites) FREN 3508 (is offered only at the Université de Nice-Sophia Antipolis in France) |
| Year 4 <br> Seventh Semester | Elective/FREN <br> FREN 4XXX <br> FREN 4XXX <br> Minor Subject <br> Minor Subject |
| Year 4 <br> Eighth Semester | Elective/FREN Elective/FREN FREN 4XXX <br> Minor Subject <br> Minor Subject |

### 14.14.2.9 Université de Bretagne Sud (UBS)

The exchange program with the Université de Bretagne Sud (UBS) in Lorient, France, is a one semester immersion program (January to May) offered by Memorial University of Newfoundland at the third and/or fourth year level. Specified and/or unspecified Memorial University of Newfoundland transfer credits are awarded for successful completion of the courses taken at UBS.
Le programme d'échanges avec l'université de Bretagne Sud à Lorient, France, est un programme d'immersion d'un semestre aux niveaux de la troisième et/ou de la quatrième année. Les cours suivis à l'UBS donneront droit à des crédits de transfert spécifiés et/ou non spéficiés de Memorial University of Newfoundland.

### 14.14.2.10 Regulations for the Major in French for Francophones

The Major in French for Francophones is offered to students who have resided in a Francophone milieu and who have an advanced comprehension of the French language beyond what is acquired in a high school French immersion program. Admission to the program is normally restricted to students who have completed a minimum of 3 years in a French speaking high school while residing in a Francophone community, dully authenticated in writing. Equivalencies for Francophone students in other circumstances will be considered by the Faculty's Undergraduate Waivers and Appeals Committee upon a written recommendation from the Head of Department.
Francophone students who choose French as their Major must complete at least 42 credit hours in French, including:

1. a minimum of 9 credit hours at the 2000 -level including FREN 2101 and 2300 and a minimum of 3 credit hours to be chosen from FREN 2601 or 2602;
2. a minimum of 18 credit hours at the 3000 -level including FREN 3100 and 3101 (or 3202 and 3203 ); a minimum of 6 additional credit hours chosen from FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508;
3. a minimum of 12 credit hours at the 4000 -level; and
4. an additional 3 credit hours at the 2000 -level or above.

Notes: 1. Francophone students cannot register for 1000-level French courses or for FREN 3300
2. Francophone students are exempted from the requirement for the Study in a Francophone Milieu.
3. International students from countries where French is an official language are advised to contact the Undergraduate Student Advisor for assistance with course planning.

### 14.14.2.11 Regulations for the Minor in French for Francophones

The Minor in French for Francophones is offered to students who have resided in a Francophone milieu and who have an advanced comprehension of the French language beyond what is acquired in a high school French immersion program. Admission to the program is normally restricted to students who have completed a minimum of 3 years in a French speaking high school while residing in a Francophone community. duly authenticated in writing. Equivalencies for Francophone students in other circumstances will be considered by the Faculty's Undergraduate Waivers and Appeals Committee upon a written recommendation from the Head of Department.
Students who choose French as their Minor must complete at least 24 credit hours in French, including:

1. a minimum of 15 credit hours at the 2000-level including FREN 2100 and 2101 ;
2. a minimum of 3 credit hours at the 3000 -level including FREN 3100 or 3101 ; and
3. up to 6 additional credit hours at the 2000 level or above.

No more than 6 transfer credit hours may be used to fulfill the minimum requirements of the Minor in French as outlined under Transfer Credit for Language Courses.
Notes: 1. Francophone students cannot register for 1000-level French courses or for FREN 3300
2. Francophone students are exempted from the requirement for the Study in a Francophone Milieu.
3. International students from countries where French is an official language are advised to contact the Undergraduate Student Advisor for assistance with course planning.

### 14.14.2.12 Joint Major in French and Joint Major in French for Francophones

As an alternative to a minor, a student may choose to complete a major in French and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry.

1. For the joint major in French, the requirement in 1.h. under the French Major Program above for 3 extra credit hours at the 2000 level or above shall not apply.
2. For the joint major in French for Francophones, the requirement in 4. under the Regulations for the Major in French for Francophones for 3 extra credit hours at the 2000 level or above shall not apply.

### 14.14.2.13 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in French, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in French to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider French courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in French IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.14.3 German

www.mun.ca/languages
German course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, German and are designated by GERM.

### 14.14.3.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.14.3.2 General Degree

All students who did not matriculate in German will begin their study with German 1000 or equivalent.

### 14.14.3.3 German Major Program

Students majoring in German must comply with the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)
and arrange their program in consultation with the German Program Liaison. It is highly desirable that, during their course of study, all students majoring in German spend at least one semester of study in a German-speaking country.
Students who choose German as their Major must complete 36 credit hours in German, including:

1. German $1000,1001,2010,2011,2900$ or $2901,3010,3011,4010$ or 4011 , and
2. 12 credit hours in German at the 3000 - or 4000 -level.

Table 1 Suggested Course Pattern for the Major in German

| First-Year | Second-Year | Third-Year | Fourth-Year |
| :--- | :--- | :--- | :--- |
| GERM 1000 <br> GERM 1001 | GERM 2010 <br> GERM 2011 <br> Recommended: GERM 2900, <br> 2901, or other GERM electives | GERM 3010 <br> GERRM 3011 <br> Recommended: 6 credit hours in GERM at <br> th 3000-level or above | Remaining courses to <br> complete the Major in German <br> including GERM 4010 or 4011. <br> Recommended: GERM 3900 <br> or 3901 |

### 14.14.3.4 German Minor Programs

1. German Minor: Students who choose German as their Minor must complete at least 24 credit hours in German, including:
a. GERM $1000,1001,2010,2011,2510$ or 3010 ; and
b. 9 credit hours in German at the 2000 -level or above.

GERM 2030, 2031, 2900, 2901, the former 2910, 3000, 3001, 3002, 3003, 3005, the former 3902, 3911, 3912, 3913, 3914, 3915 and the Special Topics courses in German Studies may not be used as part of the Faculty of Humanities and Social Sciences Language Study (LS) Requirement.
2. German Studies Minor: In addition to the German Minor, a Minor in German Studies is also available consisting of a minimum of 24 credit hours in courses including:
a. GERM $1000,1001,2010,2011,2900$ or 2901 ; and
b. 9 credit hours taken in either additional courses in German and/or from cognate courses offered by other departments, such as History 3370, 3380, Philosophy 3230, 3231, 3310 (or the former Philosophy 3850, 3851, 3860) to be chosen through prior consultation with the German Program Liaison.
GERM 2030, 2031, 2900, 2901, the former 2910, 3000, 3001, 3002, 3003, 3005, the former 3902, 3911, 3912, 3913, 3914, 3915 and the Special Topics courses in German Studies may not be used as part of the Faculty of Humanities and Social Sciences Language Study (LS) Requirement.

### 14.14.3.5 Joint Major in German

As an alternative to a minor, a student may choose to complete a major in German and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer eredit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in German, 3 fewer credit hours shall be required at the 3000- or 4000level to fulfill clause 2. under the German Major Program above.

### 14.14.3.6 Honours Degree in German

Students intending to complete an Honours degree with a major in German must comply with the Bachelor of Arts (Honours) Degree Regulations. Students are required to complete a minimum of 60 credit hours in German according to the following pattern, of which there must be a minimum of 36 credit hours at the 3000 -level or above:

1. 36 credit hours chosen in accordance with the pattern set out under the German Major Program;
2. German 4998 or 4999 ; and
3. an additional 21 credit hours, which must include German 4010 or 4011 and 4998 or 4999.

The minimum grades for the Honours program are:

1. a grade of $70 \%$ or better, or an average of $75 \%$ or higher in the minimum number of courses (including the required courses in German prescribed by the Department concerned; and
2. a grade of $70 \%$ or better must be obtained in the Honours essay and/or comprehensive examination.

### 14.14.3.7 Joint Honours Degree in German

Students who are completing a Joint Honours Degree in German will complete a minimum of 42 credit hours in German, including:

1. GERM 1000, $1001,2010,2011,3010,3011,3900$ and 3901 ;
2. 15 additional credit hours at the 3000 -level or above, including GERM 4998 or 4999 if the student chooses to write the Honours Essay and/or comprehensive examination in German; and
3. 3 credit hours in GERM at the 2000-level or above.

The minimum grades for the Honours program are:

1. a grade of $70 \%$ or better, or an average of $75 \%$ or higher in the minimum number of courses (including the required courses in German prescribed by the Departments concerned; and
2. a grade of $70 \%$ or better must be obtained in the Honours essay and/or comprehensive examination.

Table 2 Suggested Course Pattern for the Honours Program

| First-Year | Second-Year | Third-Year | Fourth-Year |
| :---: | :---: | :---: | :---: |
| GERM 1000 | GERM 2010 | GERM 3010 | GERM 4010 or GERM 4011 GERM 4998 or 4999 |
| GERM 1001 | GERM 2011 | GERM 3011 |  |
|  | GERM 2900 | GERM 3900 |  |
|  | GERM 2901 | GERM 3901 |  |
|  | Recommended: 12 credit hours at the 2000-level or above (including GERM 3510 and 3511) | Recommended: 12 credit hours at the 3000 -level or above |  |

### 14.14.3.8 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in German, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in German to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course

Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.14.4 Russian Language and Literature

## www.mun.ca/languages

Russian language courses are normally taken in succession. The prerequisite for each course is successful completion of the preceding level, or with permission of the Head of the Department. There is no prerequisite for Russian 1000.
The courses in Russian literature, film and culture may not be used as part of the Faculty of Humanities and Social Sciences requirement of 6 credit hours in a second language.
Russian course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Russian and are designated by RUSS.

### 14.14.4.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.14.4.2 Advising for Major and Minor Programs

Students interested in pursuing a major in Russian Language and Literature are advised to consult the Department very early in their undergraduate studies. For students specializing in Russian programs course selection is important to enter graduate school, teaching, library work, or government service. Students with advanced credit or competence in Russian will be placed at an appropriate level. Students are encouraged to consult with the undergraduate liaison. Students with prior knowledge of Russian may be granted transfer credit if that knowledge came from a recognized academic course. Russian courses may be challenged for credit with the permission of the Head of the Department.

### 14.14.4.3 Russian Language and Literature Major Program

A Major in Russian consists of a minimum of 36 credit hours in Russian courses including 1000, 1001, 2010, 2011 and 3010, as well as 6 credit hours in courses at the 4000 -level. The remaining 15 credit hours comprise any combination of language, literature and culture courses.

### 14.14.4.4 Russian Language and Literature Minor Program

A Minor in Russian consists of a minimum of 24 credit hours in Russian including 12 credit hours in the following: Russian 1000, 1001, 2010, and 2011.
The remaining 12 credit hours comprise any combination of language, literature and culture courses.
Students should note that with the permission of the Head of the Department, up to 6 credit hours for certain courses with a strong Russian content which are offered by other departments may be counted towards major and minor specializations in Russian Language and Literature.

### 14.14.4.5 Joint Major in Russian Language and Líterature

As an alternative to a minor, a student may choose to complete a major in Russian Language and Literature, and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Russian Language and Literature, 12 credit hours in language, literature and culture courses shall be required to fulfill the specification in the Russian Language and Literature Major Program for 15 additional credit hours above.

### 14.14.4.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Russian, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Russian to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.14.5 Spanish

www.mun.ca/languages
Spanish course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Spanish and are designated by SPAN.

### 14.14.5.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of

Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.14.5.2 Spanish Major Program

1. A Major in Spanish consists of a minimum of 36 credit hours in Spanish. It is strongly recommended that students in the Spanish Major Program complete Classics 1120 and 1121.
2. No more than 9 transfer credit hours may be used to fulfill the minimum requirements of the Major in Spanish.
3. Students who have spent an extended period of time studying Spanish in a Spanish-speaking milieu may discuss with the Head of the Department the suitability of seeking permission from the Undergraduate Waivers and Appeals Committee, Faculty of Humanities and Social Sciences to transfer up to a maximum of 3 additional credit hours.

### 14.14.5.3 Spanish Minor Program

1. A Minor in Spanish consists of a minimum of 24 credit hours in Spanish.
2. No more than 6 transfer credit hours may be used to fulfill the minimum requirements for a minor in Spanish. Students who have spent an extended period of time studying Spanish in a Spanish-speaking milieu may discuss with the Head of the Department the suitability of seeking permission from the Undergraduate Waivers and Appeals Committee, Faculty of Humanities and Social Sciences to transfer up to a maximum of 3 additional credit hours.

### 14.14.5.4 Joint Major in Spanish

As an alternative to a minor, a student may choose to complete a major in Spanish and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Spanish, 3 fewer credit hours shall be required in Spanish beyond the first year.

### 14.14.5.5 Study Abroad Programs in Spanish



The Spanish section of the Department of Modern Languages, Literatures and Cultures offers students the opportunity of participating in Study Abroad programs in Spanish. These programs are designed to provide an intensive immersion experience in a Spanish-speaking country each summer. On successful completion of one of these programs, students will be awarded specific transfer credits applicable to their academic program at Memorial University of Newfoundland.
A Study Abroad program in Spanish will be offered each summer, provided that there is sufficient enrolment. All such courses will be offered outside the normal time frame for courses offered at Memorial University of Newfoundland.
Students will be required to register for either SPAN 2010/2020 or SPAN 3010/3020 in any onê program.
Students who are unsure whether they meet the prerequisites for SPAN 2010, 2020, 3010, 3020, or 6900 should consult the Program Liaison for Spanish.

### 14.14.5.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Spanish, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Spanish to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Arts.

### 14.15 Philosophy

www.mun.ca/philosophy

### 14.15.1 Department of Philosophy Description

Philosophy is the study of general and fundamental problems concerning matters such as knowledge, truth, beauty, law, justice, mind, language, and the right and the good, using a critical, generally systematic approach relying on reasoned argument. Philosophy is one of the most influential of all areas of study, providing the frameworks in which one thinks and acts. Allowing one to make sense of oneself and one's surroundings, Philosophy teaches not what to think but how to think. The study of philosophy develops intellectual abilities. Beyond the knowledge and skills required for any particular profession, a good philosophical education enhances the capacity to participate responsibly and intelligently in public life.
The following undergraduate programs are available in the Department of Philosophy:

1. Major in Philosophy
2. Minor in Philosophy
3. Honours in Philosophy
4. Major in Medieval Studies
5. Minor in Medieval Studies

Normally, 6 credit hours in Philosophy courses at the 1000 or 2000 -level or a combination thereof, or permission from the Department, are prerequisites for Philosophy courses at the 3000-level and above. Normally, 6 credit hours in Philosophy courses at the 3000-level, or permission from the Department, are prerequisites for Philosophy courses at the 4000-level.
Philosophy course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Philosophy and are designated by PHIL.

### 14.15.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours
programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.15.3 Major in Philosophy

In addition to meeting the requirements listed under Program Regulations - General and Honours Degrees, to complete a B.A. with a Major in Philosophy, students must complete a minimum of 36 credit hours in Philosophy courses as follows:

1. 3 credit hours in Philosophy 2010 or 2020;
2. 3 credit hours in Philosophy 2030;
3. 3 credit hours in Philosophy 2040 or 2050 (or the former 3400);
4. 6 credit hours in Philosophy 2201, 2205, or 2215;
5. 9 credit hours at the 3000 -level;
6. 6 credit hours at the 4000 -level; and,
7. 6 additional credit hours at any level. Normally these will include 3 credit hours at the 1000-level.

### 14.15.4 Minor in Philosophy

In addition to meeting the requirements listed under Program Regulations - General and Honours Degrees, to complete a B.A. with a Minor in Philosophy, students must complete a minimum of 24 credit hours in Philosophy courses as follows:

1. 3 credit hours in Philosophy 2010 or 2020;
2. 3 credit hours in Philosophy 2201, 2205, or 2215;
3. 9 credit hours at the 3000 -level;
4. 3 credit hours at the 4000 -level; and,
5. 6 additional credit hours at any level. Normally these will include 3 credit hours at the 1000 -level.

### 14.15.5 Honours in Philosophy

An Honours degree provides students with a more in-depth education in the discipline of Philosophy and additional research and writing skills. An Honours degree may be required for admission to a graduate program and is useful preparation for law and other professional fields. Students considering the Honours program are encouraged to apply before their fourth semester. Admission to the program is in accordance with UNIVERSITY REGULATIONS and the Regulations for the Honours Degree of Bachelor of Arts.
In addition to meeting the general requirements for the degree, to complete a B.A. with Honours in Philosophy, students must complete a minimum of 60 credit hours in Philosophy courses as follows:

1. 9 credit hours in Philosophy 2010, 2020, and 2030;
2. 3 credit hours in Philosophy 2040 or 2050 (or the former 3400);
3. 6 credit hours in Philosophy 2201, 2205, or 2215;
4. 24 credit hours in Philosophy at the 3000-level, including 3010 or $3020 ; 3230$ or $3231 ; 3410 ; 3420$;
5. 12 credit hours in Philosophy at the 4000 -level, including Philosophy 4998 or 4999; and,
6. 6 additional credit hours at any level. Normally these will include 3 credit hours at the 1000 -level.

### 14.15.6 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of an Honours, Major or Minor in Philosophy, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Philosophy to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program and to consider Table 1 Possible Course Sequencing for the First 45 credit hours of the Bachelor of Afts.

### 14.15.7 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS - Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, students for a Philosophy Honours, Major, or Minor who had completed a 2000-level course or above in Philosophy prior to September 2018 will normally follow the departmental regulations in effect at that time, although subsequent regulations are available for all students.

### 14.15.8 Major and Minor in Medieval Studies

The Major and Minor in Medieval Studies are administered by the Department of Philosophy.
The Major in Medieval Studies and the Minor in Medieval Studies are interdisciplinary programs offered by the Faculty of Humanities and Social Sciences that aim to promote the integrated study through core courses of a historical and cultural period, the Middle Ages, here defined as the period between Antiquity and the Modern Age. Such an approach, which coordinates the methods and subjects of several disciplines, mirrors the pluralistic and interreligious framework of the age. Core courses in Medieval Studies are intended to integrate the material and provide a common focus at the beginning of the programs.
Medieval Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Philosophy, Medieval Studies and are designated by MST.

### 14.15.8.1 Advising

Students must carefully plan their course selection and regularly consult with the program's designated academic advisor. Questions about the delivery of a course should be directed to the appropriate academic unit. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.15.8.2 Declaring the Major or Minor in Medieval Studies

Students wishing to declare a Major or Minor in Medieval Studies shall consult with the program's designated academic advisor to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php.

### 14.15.8.3 Regulations for the Major in Medieval Studies

1. A Major in Medieval Studies consists of all the general requirements of the Bachelor of Arts program, including a minimum of 36 credit hours in courses chosen from Table 1 Approved Courses in Medieval Studies as follows:
a. 3 credit hours in Medieval Studies 1000 or the former Medieval Studies 2000;
b. 6 credit hours in the study of the Latin language, normally Medieval Studies 1120 and 1121;
c. 3 credit hours in one of Medieval Studies 2001 or 2002; and
d. A further 24 credit hours in approved courses, including a minimum of 6 credit hours at the 3000 -level or above, and a minimum of 6 credit hours in courses at the 4000-level;
2. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, students completing a Minor in Medieval Studies must choose a single discipline Major. Credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements all three of a Major, diploma and certificate.

### 14.15.8.4 Regulations for the Interdisciplinary Minor in Medieval Studies

1. The Minor in Medieval Studies consists of a minimum of 24 credit hours in Medieval Studies courses as follows:
a. Medieval Studies 1000 or the former Medieval Studies 2000;
b. 3 credit hours in Medieval Studies 2001 or 2002;
c. 3 credit hours in courses at the 4000 -level; and
d. an additional 15 credit hours in Medieval Studies courses. Courses at the 3000 -level or above are recommended.
2. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, students completing a Minor in Medieval Studies must choose a single discipline Major. Credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements all three of a Major, diploma and certificate.

### 14.15.8.5 Course List

to courses in various disciplines within the Faculty of Humanities and Social Sciences.
2. Not all courses are necessarily offered each year.
3. Students must be careful not to register for different designations of the same course that is crosslisted with different departments.
4. Normal departmental prerequisites for courses are applicable.

Table 1 Approved Courses in Medieval Studies


### 14.15.8.6 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS - Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, students for a Medieval Studies Major or Minor who had completed a 2000-level course or above in Medieval Studies prior to September 2018 will normally follow the departmental regulations in effect at that time, although subsequent regulations are available for all students.

### 14.15.8.7 Diploma in Humanities

The Department of Philosophy administers the Diploma in Humanities. Credit hours in Philosophy and Medieval Studies may be eligible to jointly fulfill requirements of a degree and a diploma. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.16 Political Science

## www.mun.ca/posc

### 14.16.1 Department of Political Science Description

How do people live together in societies, and how should people live together? Political Science is the study of the institutions, organizations and norms that determine public lives. In Political Science there are discussions on basic concepts - such as "power", "government" or "democracy" - in order to understand the world and humanity's place in it. Once these concepts have been explored, there will be a study of the connections between them in order to better explain political outcomes, such as: why people vote for one political party as opposed to another, why governments and public policies differ in different countries, or why armed conflicts happen in some cases but not in other cases. Memorial University of Newfoundland's Department of Political Science has research strengths in public policy; European and international politics; and elections, campaigns and voting, particularly in Canada. The quality of the Department's research and teaching is reflected in its programs and the success of its students.
The following undergraduate programs are available in the Department of Political Science:

1. Major in Law and Society
2. Minor in Law and Society
3. Honours in Political Science
4. Major in Political Science
5. Honours and Major in Political Science (Co-operative)
6. Minor in Political Science
7. Joint Major in Political Science

The Department also offers two Political Science concentrations: a concentration in Canadian Government and a concentration in Global Studies. These concentrations are applicable to all programs in Political Science other than the Minor.
Political Science course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Political Science and are designated by POSC.

### 14.16.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.16.3 General Information

1. Students for an Honours, a Major or a Minor in Political Science may consult with the Head of the Department or its Undergraduate Advisor to receive advice on Political Science course selections.
2. The Department's website at www.mun.ca/posc features details about upcoming course offerings, course instructors, the undergraduate (Honours, Major, Minor) and graduate (Master of Arts) programs, work internships, studying abroad opportunities, special events, frequently asked questions, and more. In the event of conflicting information, the official University Calendar and information issued by the Office of the Registrar shall take precedence.
3. Anticipated completion of an introductory course is generally recommended prior to enrolling in a corresponding course at the next level. Students following this path may opt to take courses in the same area in the same academic year (e.g., if a 2000-level course is completed in Fall then a corresponding 3000-level course may be taken in Winter). This is presented, for illustrative purposes only, in Table 1 Recommended Course Sequencing by Student's Area of Interest.

Table 1 Recommended Course Sequencing by Student's Area of Interest

|  | Political Theory | International <br> Politics | Comparative <br> Politics | Public Policy and <br> Administration | Canadian Politics |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Overview Course | POSC 1000 | POSC 1000 | POSC 1000 | POSC 1000 | POSC 1000 |
| Area introduction | POSC 2100 | POSC 2200 | POSC 2300 | POSC 2600 | POSC 2800 |
| Area specialization | POSC $31 x x$ | POSC $32 x x$ | POSC $33 x x$ | POSC $36 x x$ | POSC $38 x x$ |
| Advanced seminar | POSC 41xx | POSC 42xx | POSC 43xx | POSC 46xx | POSC 48xx |

With the written consent of the course instructor and the Head of the Department, certain prerequisite requirements may be waived.

### 14.16.3.1 Course Prerequisites

1. The following prerequisite schedule applies to Political Science courses, except Co-operative work term courses.
2. All research techniques courses POSC 3010, 4010, 4011 have prerequisites specified in their descriptions.
3. 1000-level: No prerequisites. Suitable for students in all disciplines.
4. 2000-level: No prerequisites. Completion of POSC 1000 and POSC 1001 is generally recommended.
5. 3000-level: Except for POSC 3010, no prerequisites. Completion of a corresponding 2000-level area introduction course is generally recommended as outlined under Table 1 Recommended Course Sequencing by Student's Area of Interest.
6. 4000-level: Prerequisites are specified in course descriptions. Completion of at least 12 credit hours in Political Science, including 6 at the 3000-level, is generally recommended.

### 14.16.3.2 Previous Calendar Regulations

Students who completed the former POSC 2010 may elect to treat it as POSC 1001 for the purposes of Political Science degree regulations and towards the Bachelor of Arts Critical Reading and Writing Requirement.

### 14.16.4 Honours in Political Science

1. An Honours degree provides students with additional research and writing skills, may be required for admission to a graduate program, and may be useful preparation for law and other professional fields. Students considering the Honours program are encouraged to apply before their fourth semester and to begin considering a potential Honours research topic before their seventh semester. Admission to the program is in accordance with UNIVERSITY REGULATIONS and the Regulations for the Honours Degree of Bachelor of Arts.
2. In addition to meeting the general requirements for the degree, students for a B.A.(Hons.) in Political Science must complete at least 60 credit hours in courses offered by the Department, including:
a. 18 credit hours in POSC 1000, 2100, 2800, 3010, 4010, 4011;
b. a minimum of 6 credit hours in Political Science courses numbered $x 2 x x$ and/or $x 3 x x$;
c. a minimum of 3 credit hours in Political Science courses numbered $x 6 x x$ and/or $x 8 x x$ (in addition to POSC 2800);
d. 27 credit hours at the 3000 or 4000 level (in addition to POSC 3010), including a minimum of 9 credit hours at the 4000 level (in addition to POSC 4010 and 4011); and
e. a further 6 credit hours in Political Science at any level.
3. Students for an Honours degree are required to select courses as specified under Honours in Political Science. A possible course pattern is presented in Table 2 Course Pattern for an Honours in Political Science.
4. Prior to enrolling in POSC 4010, all Honours students should review the Guidelines Governing Honours Essays available from the Head of the Department, and are required to follow these guidelines while enrolled in POSC 4010 and 4011.
5. Students electing Joint Honours are required to complete at least 51 credit hours in Political Science, including 42 credit hours chosen in accordance with the pattern set out in the degree regulations for a Bachelor of Arts with a Major in Political Science. An additional 9 credit hours can be selected from POSC courses, however, no more than 3 credit hours from POSC 1010 or 1020 are eligible. If the student chooses to complete the Honours Essay (POSC 4010 and 4011) in Political Science, it must be passed with a grade of $70 \%$ or better.
Notes: 1. No more than one of POSC 1010 or 1020 can be included among the 60 Political Science credit hours required for an Honours degree.
6. For Honours, the former Philosophy 3870 and the former 3890 may be substituted for $3000-l e v e l$ Political Science credit hours ( $31 x x$ ). No other such substitutions may apply.
7. If the Honours essay topic encompasses one of Canadian Government or Global Studies, the POSC 4010 and/or 4011 may be applied towards the applicable Political Science concentration, upon recommendation of the Head of the Department and subject to the approval of the Faculty's Undergraduate Waivers and Appeals Committee. Refer to Political Science Concentrations.

Table 2 Course Pattern for an Honours in Political Science (POSC)

| Term | Political Science Courses (POSC) | Credit Hours |
| :--- | :--- | :--- |
| Fall <br> Academic Term 1 | POSC 1000 | 3 |
| Winter <br> Academic Term 2 | POSC 1001, 2800 POSC 1001 is a recommended choice) |  |
| Fall \& Winter <br> Academic Terms 3 and 4 | POSC 2100 and two of x2xx or x3xx <br> One of POSC x6xx or x8xx | 6 |
| Fall \& Winter <br> Academic Terms 5 and 6 | POSC 3010 and five other 3000-levels <br> One POSC course at the 4000-level (depends upon level of courses taken in <br> previous year) | 12 |
| Fall <br> Academic Term 7 | POSC 4010 <br> Two other POSC courses at the 4000-level | 21 |
| Winter <br> Academic Term 8 | POSC 4011 <br> Two other POSC courses at the 3000- or 4000-levels | 9 |

### 14.16.5 Major in Political Science

1. In addition to meeting the general requirements for the degree, students completing a Major in Political Science must complete 39 credit hours in courses offered by the Department, including:
a. 12 credit hours in POSC 1000, 2100, 2800, 3010;
b. a minimum of 6 credit hours in Political Science courses numbered $x 2 x x$ and/or $x 3 x x$;
c. a minimum of 3 credit hours in Political Science courses numbered x6xx and/or x8xx (in addition to POSC 2800);
d. 15 credit hours at the 3000 or 4000 level (in addition to POSC 3010), including a minimum of 6 credit hours at the 4000 level; and
e. a further 3 credit hours in Political Science at any level.
2. Students for a Major degree are required to select courses as specified under Major in Political Science. A possible course pattern is presented in Table 3 Suggested Course Pattern for a Major in Political Science

Table 3 Suggested Course Pattern for a Major in Political Science (POSC)

| Term | Political Science Courses (POSC) | Credit Hours |
| :--- | :--- | :--- |
| Fall <br> Academic Term 1 | POSC 1000 | 3 |
| Winter <br> Academic Term 2 | POSC 1001, 2800 (POSC 1001 is a recommended choice) | 6 |
| Fall \& Winter <br> Academic Terms 3 and 4 | POSC 2100 and two of x2xx and/or x3xx <br> One of POSC x6x or x8xx | 12 |
| Fall \& Winter <br> Academic Terms 5 and 6 | POSC 3010 and three other 3000-levels (depends upon level of courses taken in <br> previous year) | 12 |
| Fall \& Winter <br> Academic Terms 7 and 8 | Two 4000-level POSC courses | 6 |

Notes: 1. No more than one of POSC 1010 or 1020 can be included among the 42 Political Science credit hours required for a Major.
2. POSC 1001 is a recommended choice for a Major.
3. For a Major, the former Philosophy 3870 and the former 3890 may be substituted for 3000 -level Political Science credit hours ( $31 \times x$ ). No other such substitutions may apply.

### 14.16.6 Political Science Concentrations

While meeting the requirements for a program in Political Science, other than a Minor in Political Science, students may optionally select courses in one of two formal concentrations which, if completed, will be noted on the student's transcript.

### 14.16.6.1 Concentration in Canadian Government

The concentration in Canadian Government is applicable to all programs in Political Science other than the Minor in Political Science. As part of their course selection, students opting for a Canadian Government concentration will complete a minimum of 24 credit hours in POSC courses emphasizing public policy (second digit is " 6 ") and/or Canadian politics (second digit is " 8 "). These POSC x6xx and/or x8xx credit hours must include 2600 and 2800, and at least 6 credit hours at the 4000 level. Students are generally advised to follow the possible course pattern presented in Table 4 Course Pattern for Optional Political Science (POSC) Concentration. For Honours students, credit hours in POSC 4010 and/or POSC 4011 may be deemed eligible towards the concentration; such students must submit their request in writing to the Head of the Department who will communicate a recommendation to the Faculty's Undergraduate Waivers and Appeals Committee.

### 14.16.6.2 Concentration in Global Studies

The concentration in Global Studies is applicable to all programs in Political Science other than the Minor in Political Science. As part of their course selection, students opting for a Global Studies concentration will complete a minimum of 24 credit hours in POSC courses emphasizing international politics (second digit is " 2 ") and/or comparative politics (second digit is " 3 "). These POSC x $2 x x$ and/or $x 3 x x$ credit hours must include 2200 and 2300, and at least 6 credit hours at the 4000 -level. Students are generally advised to follow the possible course pattern presented in Table 4 Course Pattern for Optional Political Science (POSC) Concentration. For Honours students, credit hours in POSC 4010 and/or POSC 4011 may be deemed eligible towards the concentration; such students must submit their request in writing to the Head of the Department who will communicate a recommendation to the Faculty's Undergraduate Waivers and Appeals Committee.

Table 4 Course Pattern for Optional Political Science (POSC) Concentration

| Concentration | Courses for Political Science (POSC) Honours or Major |
| :--- | :--- |
| No Concentration | Honours: See Table 2 <br> Major: See Table 3 |
| Canadian Government | Follow applicable Table 2 or Table 3, choosing 2600, three 36xx/38xx and three 46xx/48xx <br> courses. |
| Global Studies | Follow applicable Table 2 or Table 3, choosing 2200 and 2300, three 32xx/33xx and three 42xx/ <br> $43 x x$ courses. Up to two 31xx and/or 41xx courses may be included. |

### 14.16.7 Honours and Major in Political Science (Co-operative)

The Political Science Co-operative Education Program (PSCE) is available to full-time Political Science Honours and Majors students only.
The PSCE provides an opportunity for students to obtain public policy and other relevant full-time employment experience in fields related to Political Science, particularly governmental organizations. Students will apply their academic knowledge to practical situations as they develop their research, analysis and writing skills, as well as their career interests. A commitment to ethical and professional conduct is expected of all students.
Students who are accepted into the PSCE must complete the normal requirements for their degree, as well as three full-time work terms. In addition to following the PSCE regulations, students must satisfy the Bachelor of Arts General Degree Regulations, the Bachelor of Arts (Honours) Degree Regulations, and the Department's requirements for the Honours in Political Science or the Major in Political Science, as applicable. Additional information about the PSCE can be found on the Department of Political Science website at www.mun.ca/posc.

### 14.16.7.1 Eligibility for Admission

Admission to the Political Science Co-operative Education Program is competitive and selective.
The primary criterion used in reaching decisions on applications is overall academic achievement.
Application forms can be obtained from the Department. The annual deadline for application is November 15 (or the next business day). An application should be made in the Fall when a student expects to have completed a minimum of 42 credit hours, including POSC 1000 and 2800 , by the end of that semester.

## Admission criteria include, but are not necessarily limited to, the following:

a. students currently enrolled in the Honours in Political Science or a Major in Political Science; and
b. an overall average of at least $65 \%$, and a minimum average of $70 \%$ in Political Science courses.
c. Applicants transferring from another institution must normally have completed at least one semester at Memorial University of Newfoundland before applying to the program.
d. Applicants may be asked to attend an interview.

### 14.16.7.2 Program of Study

a. In addition to the requirements below students must fulfill all requirements for either a Honours or Major in Political Science.
b. Students' status in the program is assessed at the end of each semester. To be eligible to continue, students must maintain full-time student status ( 9 or more credits in a semester) and maintain a cumulative average of at least $65 \%$ and an average of at least $70 \%$ in Political Science courses. Students who fail to maintain the required averages will be required to withdraw from the PSCE. Such students may apply for readmission in a subsequent year after re-establishing the required averages.
c. Students must complete three work terms, at least one of which must occur during a Fall or Winter semester. No more than two of the three work terms may be completed consecutively.
d. Work terms normally begin after the student has completed four academic terms. The final work term must be completed before the final academic term.
Course patterns may vary. Students are encouraged to meet with the undergraduate coordinator early in their program in order to establish a course pattern that meets the requirements as set out in these regulations.

### 14.16.7.3 Preparation for Work Placements

The Program is coordinated by the Academic Staff Member in Co-operative Education in consultation with a designated Department faculty member.
a. A student admitted to the co-op program gives permission to the University to provide a copy of the student's résumé and university transcript to potential employers.
b. The dates for starting and finishing each work term are shown in the University Diary. At the start of the job competition students will normally be provided with a detailed description of each available position. Work placements cannot be guaranteed though every effort is made to ensure that appropriate employment is made available. With the express permission of the Academic Staff Member in Co-operative Education, students may identify and initiate contact with a potential employer outside of the placement competition, though the designated faculty member must ultimately approve all positions. Such jobs must be confirmed by letter from the employer before the first day of the work period.

### 14.16.7.4 Delivery of Work Term Placements

a. At least one work term must occur in a Fall or Winter semester. The final work term must be completed before the final academic term. Competition for placements is heaviest in the Spring semester and students are strongly recommended to complete one Spring placement outside of the St. John's area. With permission of the Academic Staff Member in Co-operative Education, and in consultation with the designated faculty member, a student may complete a maximum of two work terms in consecutive semesters.
b. Within two weeks of starting a work term, students must submit a completed confidentiality and professional conduct agreement and a plan of learning objectives for that placement to the Academic Staff Member in Co-operative Education. The placement should normally entail 35 hours of work per week for 12 weeks for a minimum total of 420 hours. Students must maintain an attendance form that must be regularly initiated by the employer and a completed copy must be submitted with the end of term requirements.
c. Remuneration for work placements is determined by employers based on their internal wage structures. Students must not expect any such income to make them completely self-supporting.

### 14.16.7.5 Evaluation of Work Term Placements

a. The first of three components of a work term evaluation will be the preparation of policy instruments such as a briefing note on a topical issue relevant to the student's placement. This will be assigned and assessed by the designated faculty member who will consider it when arriving at the final grade for POSC 260W, 360W or 460W as applicable. Evaluation of the policy instrument(s) will result in one of the following classifications: pass or fail.
b. The second evaluation component will be of a student's on-the-job performance. This will be assessed by the Academic Staff Member in Co-operative Education. Formal written documentation from the employer will be sought. Evaluation of on-the-job performance will result in one of the following classifications: pass with distinction, pass, or fail.
c. The third evaluation component will be of an oral or written assignment, to be determined by the Academic Staff Member in Cooperative Education. The assignment must be submitted to the Academic Staff Member in Co-operative Education on the first day of the final examination period and will be evaluated by the Academic Staff Member in Co-operative Education. When preparing the assignment the student must continue to respect the confidentiality of the employer. Evaluation will result in one of the following classifications: pass with distinction, pass, or fail.
d. Evaluation of the policy instrument(s), job performance and third evaluation component are recorded separately on the student's transcript.
e. Overall evaluation of the work term will result in one of the following final grades being awarded for POSC 260W, 360W or 460W as applicable, which will be noted on the student's transcript:

- Pass with Distinction: Indicates that the student received a passing grade on the policy instrument(s) and a pass with distinction on both the on-the-job performance and the third evaluation component.
- Pass: Indicates that the student received a passing grade on the policy instrument(s) and at least a pass on both the on-the-job performance and the third evaluation component.
- Fail: Indicates failing performance in one or more of the three evaluation components.
f. To be eligible for promotion from the work term and continuation in the PSCE a student must not be awarded a Fail. Students should also refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate). If a student fails the work term the student will be required to withdraw from the PSCE. Such a student may reapply to the program after a lapse of two semesters, at which time the student will be required to repeat the work term with satisfactory performance. A given work term may be repeated only once and only one work term may be repeated in the entire Program.
g. A student who accepts a job placement and who subsequently withdraws from a work term without acceptable cause will be required
to withdraw permanently from the PSCE. Students who drop a work term without prior approval from both the Academic Staff Member in Co-operative Education and the designated faculty member, or who do not honour an agreement to work with an employer, or who conduct themselves in such a manner as to cause their discharge from the job, will normally be awarded a grade of Fail for the work term in question. Permission to drop a work term does not constitute a waiver of degree requirements and students who have obtained such permission must complete an approved work term in lieu of the one dropped.


### 14.16.8 Minor in Political Science

1. Students for a Minor in Political Science must complete at least 24 credit hours in courses offered by the Department, including:
a. POSC 1000;
b. a minimum of 6 credit hours at the 2000-level, which must include POSC 2800; and
c. a minimum of 12 credit hours at the 3000 -level or above, which must include at least 3 credit hours at the 4000 -level.

Notes: 1. No more than one of POSC 1010 or 1020 can be included among the 24 POSC credit hours required for a Minor.
2. POSC 1001 and 3010 are recommended choices for a Minor.
3. For a Minor, credit hours in another discipline may not be substituted for POSC credit hours.
2. Students for a Minor are required to select courses as specified under Minor in Political Science. A possible course pattern is presented in Table 7 Course Pattern for a Minor in Political Science.

Table 7 Course Pattern for a Minor in Political Science (POSC)

| Term | Political Science Courses (POSC) | Credit Hours |
| :--- | :--- | :--- |
| Fall <br> Academic Term 1 | POSC 1000 | 3 |
| Winter <br> Academic Term 2 | POSC 2800 |  |
| Fall \& Winter <br> Academic Terms 3 and 4 | POSC 1001 (POSC 1001 is a recommended choice) <br> One of POSC 2100, 2200, 2300 or 2600 | 3 |
| Fall \& Winter <br> Academic Terms 5 and 6 | POSC 1001 (POSC 1001 is a recommended choice) <br> One POSC course at the 3000-level | 6 |
| Fall \& Winter <br> Academic Terms 7 and 8 | One POSC course at the 3000-level <br> One POSC course at the 4000-level | 6 |

### 14.16.9 Joint Major in Political Science

As an alternative to a minor, a student may choose to complete a major in Political Science and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Political Science, the requirement for a further 3 credit hours in Political Science at any level shall not apply.

### 14.16.10 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Political Science, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Political Science to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Political Science courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Political Science IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.16.11 Major and Minor in Law and Society

The Major and Minor in Law and Society are administered by the Department of Political Science.
The Major in Law and Society and the Minor in Law and Society are interdisciplinary programs that encourage students to engage in the academic and philosophical study of different facets of law and its role in society. They will acquaint and confront students with different aspects of the history, philosophical basis, and role of law in modern society. They include courses which deal explicitly with law, courses in social and political theory, and courses examining the role of law and its norms in diverse settings. Core courses in Law and Society integrate the material and provide a common focus at the beginning and the end of the programs. These are not pre-law programs nor do they offer a certificate or qualification in legal studies.
Law and Society course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Political Science, Law and Society and are designated by LWSO.

### 14.16.11.1 Advising

Due to the nature of interdisciplinary programming, students must carefully plan their course selection and regularly consult with the program's designated academic advisor. Questions about the delivery of a course should be directed to the appropriate academic unit. Information regarding advisors for the Faculty is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.16.11.2 Declaring the Interdisciplinary Major or Interdisciplinary Minor in Law and Society

Students wishing to declare a Major or a Minor in Law and Society shall consult with the program's designated academic advisor to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.16.11.3 Regulations for the Interdisciplinary Major in Law and Society

1. A Major in Law and Society consists of all the general requirements of the Bachelor of Arts program, including a minimum of 36 credit hours in courses selected from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the

Major or Minor in Law and Society and Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society below as follows:
a. as per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, courses from a minimum of any three Humanities and Social Sciences disciplines, and no more than 15 credit hours in any one Humanities and Social Sciences discipline other than Law and Society;
b. a minimum of 12 credit hours in Law and Society courses, which must include LWSO 1000 and 4000 ; and
c. an additional 24 credit hours chosen from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society and/or Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, which must include at least 15 credit hours at the 3000 -level or above, including at least 3 credit hours at the 4000 -level.
In fulfilling the requirements above, no more than 15 credit hours can be counted from Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society.
2. Before registering for any 4000 -level Law and Society course, students must complete 18 credit hours selected from courses in Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including LWSO 1000.
3. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, students completing a Major in Law and Society must also choose a single-discipline Minor or a Major in single-discipline.

### 14.16.11.4 Regulations for the Interdisciplinary Minor in Law and Society

1. A Minor in Law and Society consists of a minimum of 24 credit hours in courses selected from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society and Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society below as follows:
a. as per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, courses from a minimum of any three Humanities and Social Sciences disciplines, no more than 9 credit hours in any one Humanities and Social Sciences discipline other than Law and Society and a maximum of 15 credit hours in Political Science;
b. a minimum of 9 credit hours in Law and Society courses, which must include LWSO 1000 and 4000; and
c. an additional 15 credit hours chosen from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society and/or Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including at least 9 credit hours at the 3000 -level or above. In fulfilling the requirements above, no more than 9 credit hours can be counted from Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society
2. Before registering for any 4000 -level Law and Society course, students must complete 18 credit hours selected from courses from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including LWSO 1000.
3. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, students completing a Minor in Law and Society must choose a single discipline Major.

### 14.16.11.5 Course List

1. Interdisciplinary programs provide exposure to courses in various disciplines within the Faculty of Humanities and Social Sciences. Table 1 courses are Faculty of Humanities and Social Sciences courses whose Calendar entry establishes a focus on law and society, and are fundamental to the program of study. Subject to the program regulations, they may be supplemented with Table 2 courses whose Calendar entry establishes an emphasis on the study of aspects of society that shape and/or are shaped by law. Not all courses are necessarily offered each year. Students must be careful not to register for different designations of the same course that is crosslisted with different departments. Normal departmental prerequisites for courses are applicable.
2. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study, up to 6 credit hours obtained in undergraduate courses at Memorial University of Newfoundland that are not listed in the Faculty of Humanities and Social Sciences Course Descriptions may be deemed eligible towards the Major in Law and Society, or 3 such credit hours towards the Minor în Law and Society. Undergraduate courses not delivered by the Faculty of Humanities and Social Sciences that have been approved as Table 2 electives include Business 4000, 5000, 6040, 7322; Education 4420; Human Kinetics and Recreation 3535; Psychology 2150; Social Work 3720.
3. Students registered in the Joint Degrees of Bachelor of Arts and Bachelor of Commerce (Co-operative) who are pursuing a Major or a Minor in Law and Society are eligible to complete up to 12 credit hours for the Major and 6 credit hours for the Minor in approved courses that do not appear in the Faculty of Humanities and Social Sciences Course Descriptions. The normal limit that is identified in the Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study does not apply to those students.

Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society

| $\mathbf{1 0 0 0}$ and 2000 Level Courses | 3000 Level Courses | 4000 Level Courses |
| :--- | :--- | :--- |
| Linguistics 2220 | LWSO 3010-3019, 3300, 3400 | LWSO 3200 or History 3200 |
| LWSO 1000, 2000 or the former 2400 | Lolice Studies 3000 <br> Philosophy 2370 <br> Political Science 3210,3620,3800,3820,3830 <br> Police Studies 1000 or the former 2000, 2200 4901-4909 <br> Political Science 1000, 2800 | LWSO 4900 <br> Political Science 4200 <br> Sociology 4095, 4099, <br> 4212 |

Table 2 Other Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society

| $\mathbf{1 0 0 0}$ and 2000 Level Courses | 3000 Level Courses | $\mathbf{4 0 0 0}$ Level Courses |
| :--- | :--- | :--- |
| Anthropology 2260, 2413 | Gender Studies 3500 <br> Archaeology 2492 <br> Phitical Science 3290, 3810 <br> Posolitical Science 26050 (or the former 2230, 3400) | Political Science 4215, 4360, <br> Pociology 3130, 3290, 3320 |
| Religious Studies 2850 <br> Sociology 2100 |  |  |

### 14.16.11.6 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS - Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, students for an Interdisciplinary Major or Minor in Law and Society will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000-level or above which may be applied to the major or minor program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program. These "grandparented" students are encouraged to consult the program's designated academic advisor for assistance with course selection.

### 14.16.12 Certificate in Public Policy

The Department of Political Science administers the Certificate in Public Policy. Credit hours in Political Science and Law and Society may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.17 Psychology

For Departmental Regulations and Course Descriptions, see Faculty of Science section of the Calendar.
The following undergraduate programs are available in the Department of Psychology:

1. Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
2. Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
3. Biology and Psychology Joint Honours (B.Sc. only)
4. Biology and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
5. Major and Honours in Behavioural Neuroscience (B.Sc. only)
6. Major and Honours in Behavioural Neuroscience (Co-operative) (B.Sc. only)
7. Major and Honours in Psychology (B.A. or B.Sc.)
8. Major and Honours in Psychology (Co-operative) (B.Sc. only)
9. Minor in Psychology (B.A. or B.Sc.)

### 14.18 Religious Studies

www.mun.ca/relstudies

### 14.18.1 Department of Religious Studies Description

The Department of Religious Studies approaches the world's religious traditions and contemporary religiosity as historical and cultural phenomena, employing a variety of methods and theoretical perspectives. In addition to studying the beliefs and practices that comprise religion in its historical and contemporary forms, the Department's curriculum includes courses that contextualize religions in relation to the arts, popular culture, politics, gender, science, ethics, and secularism.
The following programs are available in the Department of Religious Studies:

1. Major in Religious Studies
2. Minor in Religious Studies
3. Joint Major in Religious Studies
4. Honours in Religious Studies
5. Joint Honours Degree in Religious Studies

### 14.18.2 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.18.3 General Information

Religious Studies 1000 is a basic courses which introduces students to the academic study of religion. Religious Studies 1040 and 1041 (Introduction to Chinese), Religious Studies 1050 and 1051 (Introduction to Biblical Hebrew), Religious Studies 1060 and 1061 (Sanskrit Language Study), are courses which fulfil the language requirement in the Faculty of Humanities and Social Sciences.
Religious Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Religious Studies and are designated by RELS.

### 14.18.4 General Degree

### 14.18.4.1 Major in Religious Studies

Students pursuing a major in Religious Studies are advised to choose their program in consultation with the Department.

1. A minimum of 36 credit hours in courses in Religious Studies is required.
2. Students must complete 12 credit hours from chosen from the Texts and Traditions Series: 2013, 2330, 2340, 2400, $2410,2420$.
3. At the third year level, students select an area concentration (either Texts and Traditions or Culture and Society). Students must complete at least 9 credit hours in Religious Studies at the 3000 level in their area of concentration.
a. Texts and Traditions: 3031, 3060, 3091, 3200, 3210, 3251, 3305, 3310, 3401, 3411, 3431, 3432
b. Culture and Society: 3053, 3058, 3276, 3415, 3540, 3640, 3650, 3800, 3810, 3811, 3812, 3840, 3860, 3880
4. Students must complete at least 6 credit hours in Religious Studies at the 3000 level from outside their area of concentration.
5. Students must complete at least 3 credit hours in Religious Studies at the 4000 level, chosen from 4001, 4002 and 4812.
6. Students must complete at least 6 additional credit hours in Religious Studies at any level.
7. A student pursuing a Major in Religious Studies is encouraged to complete Language Study (LS) courses offered by the Department in order to fulfill the Bachelor of Arts Language Study (LS) Requirement and as preparation for advanced studies in Religious Studies.

### 14.18.4.2 Minor in Religious Studies

1. A minimum of 24 credit hours in courses in Religious Studies is required, including at least 9 credit hours in courses at the 3000 level or above.
2. With the exception of the Language Study (LS) courses (1040, 1041, 1050, 1051, 1060, 1061), no more than two 1000-level courses can be counted as credit towards a minor.

### 14.18.4.3 Joint Major in Religious Studies

As an alternative to a minor, a student may choose to complete a major in Religious Studies and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Religious Studies, a minimum of 33 credit hours shall be required in clause 1. under the Major in Religious Studies and only 3 additional credit hours in clause 6. under the Major in Religious Studies above.

### 14.18.5 Honours Degree

1. Students planning to complete further work in Religious Studies should bear in mind that an Honours degree is the normal requirement for admission to Graduate Schools.
2. Students planning to complete an Honours Degree of Bachelor of Arts with a Major in Religious Studies must comply with the General Regulations for Honours Degrees, and must complete at least 60 credit hours in Religious Studies courses of which at least 36 of these 60 credit hours must be at the 3000-level or above. In addition, the 60 credit hours must include the 36 credit hours in course requirements to fulfill the Major in Religious Studies and a further 24 credit hours in Religious Studies, including one of Religious Studies 4998 (a comprehensive examination in the area of their specialization) or Religious Studies 4999 (Honours Essay).
3. Students considering Honours should arrange their program at the earliest opportunity, normally before the beginning of their fifth semester at the University.
4. Students will normally be required to have a reading knowledge of a language basic to their area of specialization.
5. In each case the program of studies leading to an Honours degree will be determined in consultation with the Head of the Department of Religious Studies, or delegate, keeping in mind the needs and interests of the individual student.
6. A student pursuing an Honours in Religious Studies is encouraged to complete Language Study (LS) courses offered by the Department in order to fulfill the Bachelor of Arts Language Study (LS) Requirement and as preparation for advanced studies in Religious Studies. Students whose area of specialization requires a knowledge of Greek must complete Classics 1130 and 1131 . In such cases these courses may be substituted for 6 of the 60 credit hours required for an Honours degree in Religious Studies.

### 14.18.6 Joint Honours Degree in Religious Studies and Another Major Subject

The attention of students is drawn to the possibility of doing a Joint Honours program that includes Religious Studies as one of the Major subjects. Such a program may be arranged in consultation with the Head of the Department of Religious Studies and the Head of the other Department concerned. Of the credit hours required in the two subjects selected, not fewer than 42, and not more than 51 , must come from each discipline.

### 14.18.7 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of a Joint Honours, Honours, Major or Minor in Religious Studies, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Religious Studies to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Religious Studies courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Religious Studies IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.19 Sociology

www.mun.ca/soc

### 14.19.1 Department of Sociology Description

Sociology explores patterns of social life and examines the development, structuring, and organization of societies in all their historical and current diversity. Sociologists seek to understand how people live, think, feel, and believe in the ongoing processes that maintain and shift society and culture. Through understanding the social forces, structures and relationships that shape our world, Sociology allows us to see why and how things are as they are, and how everything could be otherwise. Sociology is therefore central to understanding institutions, organizations, social policy, inequality, privilege, social problems and social change.

### 14.19.2 Programs in Sociology

The following undergraduate programs are available in the Department:

1. Major in Police Studies
2. Major in Sociology
3. Minor in Sociology
4. Joint Major in Sociology
5. Honours in Sociology

Sociology course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course
Descriptions, Sociology and are designated by SOCI.

### 14.19.3 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student must meet the requirements for a departmental Major, Minor, or Honours program and also meet the Program Regulations - General and Honours Degrees for the Faculty of Humanities and Social Sciences. A student is therefore advised to consult with the Admission to the Bachelor of Arts General Degree Programs regulations, the Program Regulations - General and Honours Degrees which also includes the Bachelor of Arts General Degree Components, The Major Program, and The Minor Program regulations. Information regarding honours programs is available at Bachelor of Arts (Honours) Degree Regulations as well as under each department's regulations.
A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements in the Faculty of Humanities and Social Sciences including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts (Honours) Degree Regulations. A student is advised to declare a program of study, including a Major and a Minor, before completing the first 45 credit hours of study. Information about declaring a Major and Minor in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.phip. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.19.4 Major in Sociology

Students may wish to follow the pattern for the Major in Sociology listed under Table 1 Suggested Course Pattern for a Major in Sociology (SOCI) below.
Students who undertake Sociology as their Major must complete at least 36 credit hours in Sociology as follows:

1. Core courses: Sociology 1000 (or the former 2000), Sociology 3040, Sociology 3041, Sociology 3150, Sociology 3160;
2. At least 6 credit hours in Sociology at the 4000 level;
3. No more than an additional 6 credit hours in courses below the 3000 -level may be counted toward the Major; and
4. The remaining courses, for the minimum of 36 credit hours required for the Major, may be selected from any Sociology course at the 3000 and 4000 levels.

Table 1 Suggested Course Pattern for a Major in Sociology (SOCI)

| Level | Sociology Courses (SOCI) | Credit Hours |
| :--- | :--- | :--- |
| 1000 | SOCI 1000 |  |
| 2000 | 6 credit hours at the 2000-level | 3 |
| 3000 | SOCI 3040 <br> SOCI 3041 <br> SOCI 3150 <br> SOCI 3160 | 6 |
| 3000 or 4000 | three SOCI courses at the 3000 or 4000 -level | 12 |
| 4000 | two SOCl courses at the 4000 -level | 9 |

### 14.19.5 Minor in Sociology

Students who undertake Sociology as their Minor must complete at least 24 credit hours in Sociology as follows:

1. Sociology 1000 or the former 2000, Sociology 3040, 3041, 3150, at least 3 credit hours from Sociology courses at the 4000 level, and 9 credit hours in other Sociology courses.

### 14.19.6 Joint Major in Sociology

As an alternative to a minor, a student may choose to complete a major in Sociology and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. For the joint major in Sociology, 3 fewer credit hours shall be required at the 3000- or 4000-level to fulfill clause 4. under the Major in Sociology above.

### 14.19.7 Honours in Sociology

Honours students are required to complete at least 60 credit hours in courses in Sociology, of which there must be a minimum of 36 credit hours at the 3000-level or above, including all courses prescribed for the Major in Sociology, and Sociology 4995, and must meet the requirements outlined in the Regulations for the Honours Degree of Bachelor of Arts.
It is possible to complete a Joint Honours program that includes Sociology as one of the Major subjects. Such a program may be arranged in consultation with the Head of the Department of Sociology and the Head of the other Department concerned.

### 14.19.7.1 Admission to Honours Program

Admission to the Honours program in the Department of Sociology is competitive and selective. Students who wish to enter this program must submit an "Application for Admission to Honours Program" form to the Department.
To be accepted into the Honours program, a student must not only meet the criteria laid out in the Regulations for the Honours Degree of Bachelor of Arts, but must normally have obtained a cumulative average of at least $75 \%$ in 18 credit hours in courses in Sociology which must include Sociology 3040, 3041, 3150, and 3160.

### 14.19.8 Regulations for the International Bachelor of Arts (iBA)

In addition to completing the normal requirements for a Bachelor of Arts and one of an Honours, Major or Minor in Sociology, students may elect to complete requirements for the International Bachelor of Arts (iBA). As part of the minimum 120 credit hours, a student may use eligible credit hours in Sociology to jointly satisfy other requirements of the iBA degree. When selecting courses, a student is encouraged to consult with an academic advisor early in the program, to consider Table 2 Possible Course Sequencing for the International Bachelor of Arts (iBA) (First 60 Credit Hours), and to consider Sociology courses listed in Table 3 International Studies (IS) Designated Courses. Up to 12 credit hours in Sociology IS courses may be used towards the International Studies (IS) Courses Requirement.

### 14.19.9 Major in Police Studies

The Major in Police Studies is administered by the Department of Sociology.
The Major in Police Studies aims to promote the academic study of different facets of police institutions and practices, including the legal, political and social contexts in which they operate. This program would be beneficial for students with a scholarly interest in policing, corrections or law enforcement, including those who have completed the Diploma in Police Studies; experienced police officers; and others working in a policing environment. The Major in Police Studies does not constitute a qualification in policing.
Police Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under Course Descriptions, Sociology, Police Studies and are designated by PLST.

### 14.19.9.1 Bachelor of Arts Degree Requirements

The Bachelor of Arts requires the successful completion of a minimum of 120 credit hours. A student is strongly encouraged to consult with an academic advisor to discuss available programs and requirements including the Core Requirements, The Major Program, The Minor Program, and the Bachelor of Arts Degree Regulations. A student is advised to declare a Major and a Minor (or two Majors) before completing the first 45 credit hours of study, Information about declaring a program of study In the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.19.9.2 Advising

Students must carefully plan their course selection and consult with an academic advisor. Questions about the delivery of a course should be directed to the appropriate academic unit.

### 14.19.9.3 Declaring the Major in Police Studies

Students wishing to declare a Major in Police Studies shall consult with the designated academic advisor to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/programs/undergraduate/ideclare.php. Information regarding advisors for the Faculty of Humanities and Social Sciences is available at www.mun.ca/hss/about/contact/liaisons.php.

### 14.19.9.4 Regulations for the Major in Police Studies

1. A Major in Police Studies consists of all of the requirements of the Bachelor of Arts program, including a minimum of 42 credit hours in courses as follows, which must include a minimum of 27 credit hours in Police Studies courses:
a. 21 credit hours in Police Studies 1000 or the former Police Studies 2000; Police Studies 2200; Police Studies 2300 or Sociology 2300; Police Studies 3000, 3100, and 3500; Police Studies 3395 or Sociology 3395;
b. 6 credit hours in of two of Police Studies of 4000, 4001, 4212 or Sociology 4212;
c. 3 credit hours in one of Law and Society 1000 or 2000, or an additional 3 credit hours in Police Studies at any level (excluding credit hours used to fulfill other requirements listed here);
d. 3 credit hours in one of Political Science 3010, Statistics 2500 or Sociology 3040;
e. 3 credit hours in one of Law and Society 3400; Sociology 3290; or Police Studies 3306 or Sociology 3306;

3 credit hours in one of Archaeology 2492 or Psychology 2150; and
g. 3 credit hours in one of Anthropology 2414, History 2800, Law and Society 3012 or Sociology 3180.
2. A student is expected to enroll in the Police Studies section of any applicable crosslisted courses.
3. As per the Degree Regulations, General and Honours Degrees, The Major Program, Major Program of Study, students completing a Major in Police Studies are ineligible for an interdisciplinary Minor in any program. Credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements of all three of a Major, diploma and certificate.

### 14.19.9.5 Recognition of Qualifications for Experienced Officers

1. Subject to the prior approval of the Program Coordinator, certain programs and courses offered by recognized police or other criminal justice training programs may be eligible for credit hours that are applicable towards the Bachelor of Arts, Police Studies. Graduates of the Atlantic Police Academy (APA) Police Sciences Technology Program, Holland College, Prince Edward Island; the

RCMP Depot Division Cadet Training Program; or the pre-APA program offered through the Royal Newfoundland Constabulary (RNC) for cadet training may be awarded up to 30 PLAR credit hours at an unspecified level in the Police Studies (PLST) subject area. Qualifications from other recognized police or other criminal justice training programs will be assessed on an individual basis by the Coordinator of Police Studies based on the topics covered and the number of hours involved, and will be subject to the approval of the Faculty's Undergraduate Waivers and Appeals Committee. Normally, the Committee will prioritize programs and courses that feature evaluation of student knowledge; workshops and professional development modules that do not involve evaluation are not eligible. Applicants with five or more years of professional criminal justice experience may request credit for PLST 1000 (or the former PLST 2000) or PLST 2200 as part of their maximum 30 credit hours. An Application for Transfer Credit Evaluation, including official documentation confirming program completion or professional experience, must be submitted to the Office of the Registrar to have training assessed and recognized for transfer credit. The Application may be obtained online or inperson at the Office of the Registrar
2. Unspecified Police Studies credit hours may only be used towards the Bachelor of Arts, Major in Police Studies program to meet up to 12 of the required minimum of 27 credit hours in Police Studies courses. Any remaining unspecified credit hours in the Police Studies subject area may be used in part to satisfy the Humanities and Social Sciences Elective requirements for the Bachelor of Arts, Police Studies Major program. In the case of programs where there are established course transfer credits, the student will be awarded transfer credit for the appropriate courses. Any remaining credit hours will be awarded as unspecified credit hours in the Police Studies subject area.

### 14.19.9.6 Previous Calendar Regulations

In accordance with UNIVERSITY REGULATIONS - Degree and Departmental Regulations, Year of Degree and Departmental Regulations - Faculty of Humanities and Social Sciences and Faculty of Science, students for the Interdisciplinary Major in Police Studies will normally follow regulations in effect in the academic year in which the student first completes a course in that subject at the 2000 -level or above which may be applied to the major or minor program respectively. However, the student may elect to follow subsequent regulations introduced during the student's tenure in a program. These "grandparented" students are encouraged to consult the program's designated academic advisor for assistance with course selection.
Students eligible for the former Interdisciplinary Major in Police Studies may choose between that program or the Major in Police Studies. Courses approved for the Major in Police Studies that do not appear in the Interdisciplinary Major and which are completed after August 2018 may, for the purpose of that former program, be treated as the former Table 1 courses.

### 14.19.10 Diploma in Police Studies

The Department of Sociology administers the Diploma in Police Studies. Credit hours in Sociology and Police Studies may be eligible to jointly fulfill requirements of a degree and a diploma. For further information about this program, see Diploma Programs Offered in the Faculty of Humanities and Social Sciences, or contact the program coordinator.

### 14.19.11 Certificate in Criminology

The Department of Sociology administers the Certificate in Criminology. Credit hours in Sociology and Police Studies may be eligible to jointly fulfill requirements of a degree and a certificate. For further information about this program, see Certificate Programs Offered in the Faculty of Humanities and Social Sciences, of contact the program coordinator.

## 15 Course Descriptions

### 15.1 Anthropology

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, contact the Head of the Department.
Students should note that credit may not be obtained for an Archaeology course if, prior to 2007, the student received credit for that course when it was designated as an Anthropology course.
A tentative lists of upcoming Anthropology course offerings can be found at www.mun.ca/hss/courses.php.
Anthropology courses are designated by ANTH.
1031 Introduction to Anthropology provides an overview of the field of social and cultural anthropology It covers key anthropological concepts used to study issues such as inequality, social justice, the environment, work, politics and law, family, identity, gender and sexuality, ethnicity, spirituality, and communication. An emphasis is placed on human diversity, international examples, and processes of globalization. This course is suitable for students in all disciplines.
CR the former ANTH 1000 or 2000
2260 War and Aggression (same as the former Sociology/Anthropology 2260 and the former Sociology 2260) is a critical review of ethological, psychological and sociological approaches to the understanding of violence and organized aggression.
CR: the former Sociology/Anthropology 2260, the former Sociology 2260
2280 The City (same as the former Sociology/Anthropology 2280 and the former Sociology 2280) examines varieties of urban life around the world and through history. The city as habitat and as spectacle.
CR: the former Sociology/Anthropology 2280, the former Sociology 2280

2350 Religious Institutions (same as Religious Studies 2350) is a contextual study of religious institutions and beliefs, calendrical feasts and solemnities, religious roles and hierarchies, ritual innovation and revitalization.
CR: Religious Studies 2350, the former Sociology/Anthropology 2350, the former Sociology 2350
2410 Classics in Anthropology is an examination of selected milestone monographs, ground-breaking studies for subdisciplinary specialties, and major syntheses.

2411 Anthropologists in the Field combines a firsthand introduction to ethnographic research and writing with an exploration of how anthropological understanding develops through the experiences and human relationships of anthropologists in the field.

2412 Threatened Peoples is an examination of key social and cultural factors involved in the global extinction of small-scale societies; the intrusive influences that jeopardize small-scale societies, such as disease; economic and military incursion; the role of international non-governmental agencies in aid of threatened peoples; and the role of the anthropologist in this human crisis. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

2413 Culture, Society and Globalization explores the way in which social, cultural, economic and political interconnections at the global level interact with local social and cultural processes. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

2414 Aboriginal Peoples of North America is a survey course dealing with various indigenous peoples of North America.
CR: the former ANTH 3281
2415 Anthropology of Food explores how cultural identities, social relationships, and inequalities are linked to the production, exchange, and consumption of food.

2416 Cultural Formations explores the symbolic formations that humans create in order to give meaning to their lives. Some of the cultural formations that will be studied include specific examples from the realms of religion, play, sports, art, and commonplace material objects.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

3050 Ecology and Culture reviews the co-evolution of the fields of ecology and anthropology since the late 19th century and examines the variety of contemporary perspectives on the interconnection between social and ecological systems.

## 3052 Anthropology and Directed Social Change - inactive course.

3053 Anthropology of Religion (same as Religious Studies 3053) is a critical evaluation of anthropological research on religion, centering on seminal thinkers and major theoretical traditions. Special attention is given to the study of belief systems, and to relationships between belief and ritual.
CR: Religious Studies 3053
3054 Play, Games and Sport is an examination of the phenomenon of play in a variety of human cultures, and in such forms of activity as religion, politics, festival, speech, performance, and artistic creation. Principal themes are the functional role of play in social relations, and the meaningful role of play in social thought.

3058 Urban Anthropology is an examination of anthropological studies of urban populations and population segments, such as ethnic groups and categories, occupations, neighbourhoods, etc.

3060 The Idea of Culture is the history of ideas, dealing with the emergence of this key anthropological concept, the meanings it has acquired, its broader implications, and major critiques of its use in the social sciences.

3061 Culture and Social Inequality examines the role of culture in mediating different forms of social inequality, exploring the idea that culture is not only a way of life but also a way of managing power among unequals, from individuals to social classes. Readings in the course concentrate on cultural techniques of social control.

3062 Anthropology in Social Policy-making - inactive course.
3063 The Politics of Ethnicity and Multiculturalism examines anthropological approaches and contributions to debates about ethnicity and multiculturalism.

## 3064 Anthropology and the Study of Social Problems - inactive course.

3070 Aboriginal Self-Governance (same as the former ANTH 4070) examines contemporary Issues on the development of, and barriers to, selfgovernment among Canadian aboriginal peoples. The focus will be on topics such as land claims and claims settlements, self-government agreements and proposed agreements, economic development, environmental and social Impact of Industrial developments, and cultural and religious revival. CR: the former ANTH 4070

3073 Imaginary Worlds explores the anthropology of imaginary worlds, including those created through pseudo-history, on-line gaming, science fiction and fantasy literature, and film. Particular examples will be examined in terms of the ways that social stratification, gender, ethnicity, race, and cultural beliefs become constructed inside of these imaginary worlds.

3082 Banditry, Rebellion, and Social Revolution examines types of social conflict specific to different kinds of class-based society, including social banditry, primitive rebellions, and peasant revolutions. More generally, social conflict is used to explore the variety of ways that pre-industrial societies have been made part of the modern world economy.
3083 Global Environmental Crises examines the social, cultural, and economic forces that have contributed to rapid resource depletion and other environmental changes from the 20th century to present, and looks at how the impacts of these changes have been experienced around the world. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3100 Dominance and Power (same as the former Sociology/Anthropology 3100 and the former Sociology 3100) is a study of dominance behaviour in human societies, surveying the range from private to public and from openly exploitative to fully legitimate power systems.
CR: the former Sociology/Anthropology 3100, the former Sociology 3100
3200 Anthropology of the Global Economy explores the way in which anthropologists have studied the inter-linkages among economic, social and cultural processes. Topics covered include key concepts (e.g., gifts and commodities, exchange relationships) and debates (e.g., formalist versus substantivist) in economic anthropology, and the way in which different societies and social groups are integrated within global capitalist markets. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former ANTH 4200
3240 Regional Studies: Contemporary Native Peoples of Canada inactive course.

3241 Regional Studies: The Atlantic is selected topics in the ecological, cultural, economic, social and political characteristics of the North Atlantic Region.

3242 European Societies - inactive course.
3249 Peoples of the Pacific - inactive course.
3254-3257 Regional Studies (same as the former Sociology/Anthropology 3254-3257 and the former Sociology 3254-3257) are interdisciplinary approaches to the study of selected regions.
CR: the former Sociology/Anthropology 3254-3257, the former Sociology 3254-3257

3260 International Development (same as Sociology 3260) is an examination of theories of development including a critical analysis of international case studies. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: Sociology 3260, the former Sociology/Anthropology 3260
3280 The Arctic studies cultural, ecologic, economic and social systems in the northern circumpolar regions.
3300 Fieldwork Methods focuses on the process of anthropological fieldwork. Readings, discussions and evaluations will examine a range of issues and concepts that include observation techniques, interviewing, ethical issues, and the interpretation of data. Students will conduct original fieldwork to learn how to apply some of these skills.
CR: the former ANTH 4300
3305 The Anthropology of Gender - inactive course.
3384-3389 Regional Studies in Anthropology
3403 The Anthropology of Travel and Tourism is an exploration of the anthropological study of travel and tourism. Students will learn how to critically evaluate this global industry and consider the role that it plays in the formation of contemporary human identity.

3404 Visual Anthropology explores the use of documentary film, photography, and new digital media in anthropological fieldwork. It also teaches students how anthropologists study visual media such as television, newspapers, popular films, social networking sites, web sites, and photography collections.

3406 The Anthropology of Ritual examines a range of theoretical perspectives, case studies and individual theorists in the study of ritual.
3407 Medical Anthropology focuses on a range of issues including illness, disease and healing, sexuality and reproduction, pandemics and epidemics, medical technology and bioethics.
3408 Engaged Anthropology is a seminar course exploring debates about the potential - and potential pitfalls - of a variety of approaches to publicly engaged anthropology.

3409 War and Globalization examines selected wars of the late 20th and 21st centuries to understand how war, political violence and the repartitioning of the world have become intrinsic features of the current era of globalization. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3410 Classic Theory in Anthropology (same as the former ANTH 4410) follows a historical approach to understanding some of the key theoretical trends in anthropology since the inception of the discipline.
CR: the former ANTH 4410
3411 Anthropology of Foraging deals with societies heavily reliant on hunting, fishing, and gathering wild foods. Industrial and post-industrial settings in which various forms of foraging (including recycling) are the basis for some people's livelihood will also be considered.

3421-3430 Anthropological Specialties will have a topic of current interest and importance announced by the Department for each term.

## 3451 Ethnography of Gambling - inactive course.

3452 Fisheries, Aquaculture, and the Global Commodity explores social and environmental tensions related to the increasing commodification and financialization of fisheries around the world. Topics include the changing roles of fisheries and aquaculture in global and local economic and food systems; the impact of fisheries privatization and restructuring on coastal communities; environmental crises related to fisheries and aquaculture; and ways that science and technology have constructed and transformed both fish and aquatic environments. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3630 New Media Methods in Social Research (same as Sociology 3630 and the former Sociology/Anthropology 3630) will explore non-print means for recording social behaviour and will utilize various forms of the media as a descriptive and an analytic tool.
CR: Sociology 3630, the former Sociology/Anthropology 3630
3700 Social and Cultural Change - inactive course.
4030 Legal Anthropology - inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4071 Social and Cultural Aspects of Health and Illness (same as Sociology 4071) will cover topics which may include: cultural concepts of illness and health; theories of disease causation; relationships between social life and illness patterns; symbiotic use of illness; variations in philosophies of treatment and in practitioner/patient relationships; the social organization of medicine.
CR: Sociology 4071, the former Sociology/Anthropology 4071
4072 Social and Cultural Aspects of Death (same as the former Sociology/Anthropology 4072 and the former Sociology 4072) covers topics which may include: symbolic meanings and values attached to death; cultural and historical variations in the management of death, e.g. treatment of the 'terminally ill', burial rites, the mourning process, and the social fate of survivors, together with the social and psychological meanings of these behaviours. Open to those without normal prerequisites by permission of the Instructor.
CR: the former Sociology/Anthropology 4072, the former Sociology 4072
4073 Studies in Underclass Life (same as the former Sociology/ Anthropology 4073 and the former Sociology 4073) is a critical inquiry into the social sources of human misery and suffering that characterize life in the underclass.
CR: the former Sociology/Anthropology 4073, the former Sociology 4073
4081 Advanced Seminar in the Anthropology of Gender - inactive course.

## 4089 Language and Social Change - inactive course.

4201 Current Debates in the Anthropology of Ireland explores selected current debates in the anthropology of Northern Ireland and the Republic of Ireland. Seminars centre on the critical reading of recent ethnographic studies. The course considers Ireland, north and south, as a changing scene, assesses the current state of Irish ethnography and considers how the field might develop.

4202-4209 Special Areas in Anthropology is a series of individual or small group tutorials and reading courses on topics of special or current interest. PR: Departmental permission

4280 Advanced Newfoundland and Labrador Ethnography surveys the ethnographic literature on Newfoundland and Labrador, past and present, with special emphasis on ecological adaptation, interpersonal relations, class formation, patronage, brokerage, clientship, state formation, and modernization.

4301 The Intensive Study of One Culture - inactive cours
4302 Ethnographic Life Histories - inactive course.
4412 Contemporary Theory in Anthropology is an evaluation of current approaches to culture and power through a focus on critical issues and major schools of contemporary thought influencing Anthropology in the late 20th and early 21st centuries. Emphasis is placed on major works, paradigms and individual theorists.
4415 Labour and Global Capitalism examines core issues and problems entailed in the anthropological analysis of work and labour in the context of the global economy. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
4416 Anthropology of Slums examines social class forces producing a planet of slums, and details ways that everyday forms of violence, social injustice, and poverty take social shape in the everyday lives of slum dwellers. Among the topics covered are: social class formations, including ghettos, favelas, and shanty towns; surplus populations and disposable peoples resulting from late capitalist globalization; and forms of resistance and struggle that arise within dispossessed populations. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/ IS.
4417 Anthropology of Sound examines how ethnographers do comparative research on the everyday sounds found in people's daily environments, including music and new media products.

4418 Marx and Social Inquiry examines the uses of Marx's later writings, especially Capital, in current American Anthropology. The primary focus is on the agenda-setting works of Eric Wolf and David Harvey. Topics include: capital accumulation and the making of localities; primitive accumulation and class formation; uneven global development; crises of capitalism and crises of social reproduction; capitalist globalization and disposable surplus populations.
4422 The Craft of Writing Anthropological Narrative is a seminar open to senior students in any discipline, which examines in detail both the mechanics and the sensitivities necessary to produce literate analysis.
4450 Politics of Landscapes is a survey of the variety of past and present systems of land tenure, showing their relevance to development/ underdevelopment, conflicts with the state, relationships to social organization, symbolic significance, etc.

4994 Honours Essay I prepares students for the Honours Essay by helping them refine their research topics; providing them with independent research and writing skills; and offering a structured context in which to conduct the preliminary stages of Honours Essay research and writing.
PR: admission to the Honours program in Anthropology
4995 Honours Essay II is required as part of the Honours program. PR: ANTH 4994

### 15.2 Archaeology

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Head of the Department.
Students should note that credit may not be obtained for an Archaeology course if, prior to 2007, the student received credit for that course when it was designated as an Anthropology course.
A tentative list of upcoming Archaeology course offerings can be found at www.mun.ca/hss/courses.php.
Archaeology courses are designated by ARCH.
1000 Introduction to Archaeology (same as the former ARCH 1030) is a broad overview of Archaeology and Bioarchaeology introducing the concepts of human biological and cultural evolution and the methods and techniques by which these are investigated. The course is designed to provide the basis for further study in the disciplines.
CR: the former ARCH 1030
1001 Critical Reading and Writing About the Archaeological Past is an introduction to archaeological literature including essays, monographs, and journal articles and popular media. Emphasis is placed on critical reading and writing, analyzing texts, framing and using questions, constructing essays, organizing paragraphs. Students learn elements of academic assessment of literature and technical skills to refine analytical writing. All sections of this course follow the Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: the former ARCH 2590
1005 Critical Reading and Writing in Indigenous - Aboriginal Studies (same as History 1005) features the analysis of scholarly literature, media, and other sources of knowledge related to Aboriginal and Indigenous studies. Students practice analytical reading and writing through class discussion and assignments related to the study of both past and present. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: History 1005, the former ARCH 2590, the former History 1016
$\mathbf{2 4 3 0}$ Principles of Bioarchaeology investigates the human animal as we exist now and as we developed through time. Students will discover how the study of fossil remains, living and extinct primates, and the applications of the principles of genetics, adaptation and variation of human evolution help to provide an understanding of how biology and culture have interacted to produce modern humans.
PR: ARCH 1000 or the former 1030
2450 Principles of Archaeological Science introduces the student to a broad range of scientific approaches and quantitative methods used in archaeology. The course provides an overview of the historical development of archaeological science and a survey of the analytical techniques used to investigate materials recovered from archaeological contexts, including biomolecular methods, statistical analysis of data, geophysical prospection, dating techniques and quantitative methods of calibration, and remote sensing. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.

2480 Principles of Archaeology is an introduction to archaeological techniques, methodology and theory. Classes cover the development of the discipline, techniques of survey and excavation, and the main methods of archaeological analysis and interpretation.
OR: may be offered in an accelerated format outside the regular semester or session timeframe
PR: ARCH 1000 or the former 1030 or permission of the instructor
2481 Ancient Civilizations of the Americas is a survey course introducing the archaeology and ethnohistory of the Aztec, Inca and Maya. The course is comparative and thematic, addressing the development, ideology, economics and administration of each civilization. The events and responses of these Indigenous civilizations to contact with Europeans will be investigated, examining the reasons their cities collapsed while the descendants of their populations continue to inhabit the same regions today.
2482 Indigenous Peoples and the Struggle for Self-determination explores, in a Pan-American comparative perspective, the experiences of

[^18]Indigenous peoples inhabiting the nation-states that emerged out of the European settlements. The loss of self-determination and struggles to regain it are shared experiences but the routes followed historically and in the present are not the same. Understanding Indigenous Peoples' diverse experiences of, and struggles against, colonialism will enable the alliances needed for more just and sustainable societies.
2492 Forensic Archaeology is an examination of procedures and techniques used by Biological anthropologists and archaeologists to obtain data pertinent to investigations by law enforcement and medical authorities; evidence concerning the identification of human remains and the cause, time and manner of death.
UL: may not be used for credit toward a major or minor in Archaeology
2493 Archaeology on Film explores the use of archaeology as a popular backdrop to many films and documentaries. Yet, the manner in which archaeology is represented in modern film is hardly realistic, or is it? The portrayal of archaeology in popular film will be discussed in order to determine what movies convey to the public about archaeological method and theory as well as the historical stories that archaeologists investigate.
UL: may not be used for credit toward a major or minor in Archaeology
2494 Game of Genders: Sex and Society in the Medieval North (same as Medieval Studies 2494) introduces students to considerations and expressions of gender in northern medieval society, with particular reference to Viking and Anglo-Saxon worlds. The course explores the concept of gender and considers varied gendered identities found in material and textual evidence. Students will reflect on how significant cultural changes, such as the conversion to Christianity and the expansion to the North Atlantic and to L'Anse aux Meadows, laid the foundation for what is considered gender appropriate in Western society.
CR: Medieval Studies 2494
PR: it is recommended, but not obligatory, that students should have successfully completed ARCH 1000 or the former 1030 or Gender Studies 1000
2495 Archaeological Frauds and Mysteries will explore the sensationalized and 'unreal' side of archaeology and delve deeper into popular misconceptions of the past. From unraveling the mysteries of Big Foot to evaluating the evidence for alien life on Earth, students will learn how scientific methodology is used to determine facts from myths in archaeology.
CR: the former ARCH 2491
UL: may not be used for credit toward a major or minor in Archaeology
2583 Introduction to Applied Archaeology (same as the former ARCH 3583) is designed to familiarize students with field and laboratory techniques. Students will learn about research design and the methodologies involved in archaeological site survey and excavation. Students will be instructed in the identification of archaeological sites, completion of site inventory forms, the use of surveying instruments, and the creation of accurate site maps, using these instruments as well as the concepts associated with archaeological excayation, mapping, recording and photography. Moreover, students will be given basic instruction in artifact identification, processing and cataloguing. This course is intended to be a precursor to ARCH 3585 and 3586.
CR: the former ARCH 3583
OR: may be offered in an accelerated format outside the regular semester or session timeframe
PR: ARCH 2480
3001 Art, Architecture and Medieval Life (same as Medieval Studies 3001, History 3020, Folklore 3001) is an examination of the development of medieval art and architecture and of the ways in which they mirror various aspects of life in the Middle Ages. This course will include a discussion of art and architecture in the countryside, in the town, in the castle, in the cathedral and in the cloister.
CR: the former ARCH 3589, Anthropology 3589, Medieval Studies 3001, History 3020, Folklore 3001
PR: it is recommended but not obligatory, that students should have successfully completed one of the following courses: ARCH 2480, the former ARCH 2582, Folklore 1000 or the former 2000, History 2320, Medieval Studies 2001, History 2330/Medieval Studies 2002, or Medieval Studies 1000.or the former 2000.
3020 What is Human? discusses how humans have long considered themselves unique. Through readings, discussions and presentations this seminar will explore exactly how distinctive humans are in their biological, behavioural, and intellectual traits and whether there is, in fact, something which sets us apart from all other creatures.
PR: ARCH 2430
3040 The Human Skeleton reflects genetic, environmental and cultural influence. This course, emphasizing identification of individual bones in the skeleton, techniques for obtaining size and shape differences in individual bones and the entire skeleton, estimation of group numbers and death rates, and diagnosis of disease and other abnormal conditions, provides a means of assessing all of these influences on past human populations.
PR: ARCH 2430

3290 First Peoples of Newfoundland and Labrador explores the archaeological history of the area which today includes Newfoundland and Labrador and eastern Québec, from entry of humans into the region until the time of European contact, including the ancestors of the Beothuk, Mi'kmaq, Innu, and Inuit. Particular attention is paid to the interactions among the various archaeological cultures in the region and their adaptations to the local environment.
PR: ARCH 1000 or the former 1030 or permission of the instructor
3291 First Peoples of the Maritime Provinces explores cultural developments in the area which today includes the Maritime Provinces and northern Maine, from the entry of humans into the region until the time of European contact, including the ancestors of the Mi'kmaq, Wolastoqiyik, and Peskotomokhadi. Emphasis is placed on cultural adaptations to a changing regional environment and the evidence for intercultural contact.
PR: ARCH 1000 or the former 1030 or permission of the instructor
3500 Prehistory of Africa, Asia and Europe I examines the early stages of cultural evolution in the Old World. Topics include: earliest human origins in Africa; the dispersal of humans throughout the Old World: the appearance of modern-type humans during the last ice age
PR: ARCH 1000 or the former 1030
3505 Prehistory of Africa, Asia and Europe II is a survey of the more recent stages of human cultural evolution in the Old World. Topics include: complex behaviour of modern-type hunter-gatherers of the last ice age; the domestication of plants and animals in early farming communities.
PR: ARCH 3500
3510 The Ancient Americas is a survey of cultural development in the Americas from the entry of humans until the time of European contact. Topics include: the earliest human migrations and the dispersal of human groups throughout the New World; the development of complex huntinggathering societies; the origins of agriculture and sedentism.
PR: ARCH 1000 or the former 1030 or permission of the instructor
3515 Prehistory of Mesoamerica (same as the former History 3515) discusses the Spanish explorers arriving in Mesoamerica i.e. Mexico and Guatemala of today, and how they discovered rich and complex civilizations that had developed independently of European or Asian influence. This course traces the development of Mesoamerican civilizations from their known origins to the point at which growth was terminated by Spanish intervention.
CR: the former History 3515
PR: ARCH 1000 or the former 1030
3520 Aboriginal History to 1763 (same as History 3520, Anthropology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment. CR: History 3520, Anthropology 3520

3525 Aboriginal History from 1763 (same as History 3525, Anthropology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.
CR: History 3525, Anthropology 3525
3536 Object Lessons: Putting Strange Things in Context (same as History 3536) explores the interpretation of unique objects, especially those which have been separated, in some way, from their historical context or archaeological assemblage. Students will take a multi-disciplinary approach to understanding a specific remarkable artifact. Topics include the history of technology, the emergence of art, the invention of tradition and the role of design in industrial societies.
CR: History 3536
PR: it is recommended but not obligatory, that students should have successfully completed one of the following courses: ARCH 1000 or the former 1030, Classics 1100 or 1200, Folklore 1000, History 1010 or 1011
3561 Ethnoarchaeology is a subfield of archaeology that uses recent ethnographic information to interpret and explain the material remains of past human behaviour. This course compares the goals and methods of ethnoarchaeologists with those of ethnographers and archaeologists. Case studies are used to illustrate the different approaches and concerns of ethnoarchaeologists working in different regions of the world.
PR: ARCH 1000 or the former 1030, or permission of instructor
3580 Bronze Age Archaeology of the Eastern Mediterranean (same as Classics 3580) examines the archaeological evidence that underlies the current reconstruction of the Bronze Age in the eastern Mediterranean. The Bronze Age of the Aegean and the island of Cyprus is essentially prehistoric and inaccessible except through the methods of archaeology; physical dating techniques, geoarchaeology, residue studies, palaeoethnobotany, zooarchaeology, forensic anthropology, underwater archaeology and cultural
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).
resource management. Pieced together these give us a compelling picture of the cultural history, lifeways and the dynamics of cultural change during this important period. Emphasis is placed on the role of Cyprus as a physical and cultural link between peoples of the Aegean and the Near East.
CR: Classics 3580
PR: ARCH 1000 or the former 1030 or permission of instructor
3582 Historical Archaeology (same as the former ARCH 2582, the former History 2582, and History 3582) will introduce students to historical archaeology, with special reference to the North Atlantic, 1000 to 1900 AD. The archaeology of specific sites will be examined in order to raise issues about theory and method. Students will be introduced to paleography; historic maps; documentary archaeology; the survey, excavation and analysis of complex sites; material culture and subsistence studies; consumer studies; cultural resource management; archaeological conservation; and nautical archaeology.
CR: History 3582, the former Archaeology 2582, the former History 2582, the former History 3530
PR: ARCH 1000 or the former 1030
3584 Historical Anthropology (same as the former Anthropology 3584 and History 3535) will explore selected issues in historical anthropology, with special reference to the Mediterranean and North Atlantic worlds. Students will read specific case studies in order to explore the theoretical issues raised by the attempt to understand historically-documented past cultures. In order to give practical examples of methodology classes will analyse primary source material. Students will be introduced to the textual analysis of myth and legal records, to the interpretation of images and to the analysis of patterns in material culture. The course will consider specific current interpretive issues, particularly the rise of individualism, the consumer revolution and the cultural construction of gender.
CR: the former Anthropology 3584, History 3535
UL: not applicable towards the Major or Minor in Anthropology
3585 Archaeological Fieldwork provides instruction and experience in site survey, mapping and sampling strategies, as well as the careful excavation and recovery of archaeological materials (i.e., artifacts and ecofacts). Students also receive an introduction to archaeological research pertaining to cultures of a selected region.
AR: attendance is required
CO: ARCH 3586
PR: ARCH 2583 or the former ARCH 3583 and permission of the instructor
3586 Laboratory Techniques instructs students in the methods used to clean, catalogue and interpret archaeological materials. Students will also receive training in proper archaeological conservation procedures.
$A R$ : attendance is required
CO: ARCH 3585
PR: ARCH 2583 or the former ARCH 3583 and permission of the instructor
3588 Arctic Archaeology is an introduction to the archaeology of the Canadian Arctic, Greenland, and Alaska, from earliest settlement to historic interactions between Inuit and Europeans. Special emphasis is placed on the eastern Canadian Arctic, and the changing social and economic adjustments arctic peoples have made to a challenging environment.
PR: ARCH 1000 or the former 1030 or permission of the instructor
3590 Hunter-Gatherer Studies (same as the former Anthropology 3590) examines past and present hunting and gathering societies from various areas of the world, both from an ethnographic and an archaeological perspective.
CR: the former Anthropology 3590
PR: ARCH 1000 or the former 1030 or permission of the instructor
UL: not applicable towards the Major or Minor in Anthropology
3592 Norse Archaeology (same as Medieval Studies 3592) explores the influence of the Vikings on the medieval world and the place of L'Anse aux Meadows within this cultural milieu. Students will be introduced to VikingAge archaeological and literary texts to gain knowledge of specific questions and problems concerning multicultural contact within the Viking-Age world, specifically the North Atlantic region. They will also gain an appreciation of the challenges associated with using interdisciplinary evidence as well as migration and multicultural issues in the past and present.
CR: Medieval Studies 3592, the former ARCH 3685
PR: ARCH 1000 or the former 1030
3593 Archaeology of Children examines emerging archaeological and bioarchaeological research on children and childhood. Topics include play, learning, work, embodiment, identity, death, narrative approaches to children's lives, and the paleoanthropology of childhood.
CR: the former ARCH 3684
PR: ARCH 1000 or the former 1030
3594 Archaeology of Sport addresses organized recreation as a fundamental variety of past social activity. The evolution of athletic physiology, bioarchaeological traces on past bodies, sporting facilities and equipment, animal sports, experimental and ethnoarchaeological approaches, and the varying social, ritual and economic contexts of past athletic performance will be examined, with case studies of notably large scale and long-running sporting phenomena such as chariot racing and the

Mesoamerican ballgame.
CR: the former ARCH 3681
3650 Artifacts from North American Contexts 1600-1900 (same as Folklore 3650 ) provides students with practical experience in the analytical methods used to identify, date and interpret artifacts from 1600-1900 contexts in North America. Detailed discussions on manufacture, technology, form and function provide the necessary background for a better understanding of concepts relating to artifact identification, provenance, dating techniques, and other current issues. Practical, hands-on exercises will help reinforce weekly topics and teach students the fundamentals required to interpret artifact assemblages from the historic period.
CR: Folklore 3650, the former Anthropology 3683
3651 Archaeology of Exploration, Interaction and Settlement in the Americas focuses on the history and archaeology of European colonization of North America from approximately 1500 to 1700. A diverse range of topics will be discussed including: colonialism; Indigenous peoples; early colonies and seasonal outposts; extractive industries; war, trade and economics; daily life in pluralistic societies; the material record; the built landscape and maritime archaeology.
CR: the former ARCH 3862, or the former Anthropology 3682
PR: ARCH 1000 or the former 1030
3680-3689 (Excluding 3687 and 3688) Studies in Archaeology and Prehistory will include the consideration of current developments in methods, techniques and theory as applied to selected areas of the world. PR: ARCH 1000 or the former 1030

3687 The Archaeology of Death explores archaeological studies of mortuary rituals, human remains and grave goods to provide insight into past social structures, cultural ideals, identity, and community beliefs. This course takes multiple approaches to understand the variability in archaeological mortuary practices cross-culturally over time and space.

3688 Coastal Archaeology studies human adaptations to coastal landscapes with an emphasis on the analysis of shell middens. Shell midden sites can contain millennial-scale records of archaeological and environmental events, and when analyzed the contents can be used to interpret past food procurement strategies, migration, settlement, technology and how people responded to short- and long-term ecological changes.
PR: ARCH 2480

## 3710 Museums and Historic Sites - inactive course.

3750 Archaeology of Warfare is a broad overview of archaeological research conducted at sites associated with human conflict spanning from ancient times to World War II. Weekly lectures and hands-on exercises will provide students with a solid background on the various means by which archaeologists study and excavate sites relating to war, conflict and captivity. A broad range of topics will be covered including remote sensing and field survey techniques, the changing technology and tactics of war, battlefield sites, POW camps, sunken naval vessels, aviation sites, fortifications and frontier outposts.
PR: ARCH 1000 or the former 1030
3850 Material Culture (same as Folklore 3850) is an introduction to the study of material culture and the question of why objects are important to us. Using folklore and interdisciplinary approaches, we will look at objects as cultural products, question the influence of objects on behaviours, and address the role of objects in historical and ethnographic research.
CR: Folklore 3850
3860 Vernacular Architecture - inactive course.
4015 Cultural Resource Management (same as Folklore 4015 and Geography 4015) is a study of cultural resource management: the definition and recognition of cultural resources, the application of policy in managing cultural resources, and the identification and consideration of contemporary issues in cultural resource management. Three hours of lecture and three hours of seminar per week.
CR: Folklore 4015 and Geography 4015
PR: ARCH 2480 or the former ARCH 2582
4041 Palaeopathology looks at disease, diet, genetics, accidents and maternal health factors as contributors to variations in the human skeleton. In this lecture and seminar course students will investigate how these factors are diagnosed from bones, and aspects of the culture, health, economy and environment of the skeletal individuals are examined.

## PR: ARCH 2430 and ARCH 3040

4043 Biomolecular Archaeology is a rapidly developing, multidisciplinary subfield of archaeology concerned with unraveling aspects of human behaviour and adaptation from ancient biomolecules preserved in artifacts and biological remains. Through lectures, directed readings and seminars this course aims to review and critically assess the many facets of biomolecular archaeology, including how biological and (geo-chemical methods can be used to address questions of diet, migration and ancestry in the past.
PR: one of ARCH 2430, ARCH 2450 or ARCH 2480
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4050-4059 Special Projects in Bioarchaeology includes directed reading, seminars and lab analysis of various skeletal collections. Topics to be covered may include primate behaviour, forensic anthropology, stable and radiogenic isotope analysis and various aspects of human evolution.
PR: ARCH 2430 and ARCH 2450
4150 Environmental Change and Quaternary Geography (same as Earth Sciences 4703 and Geography 4150) examines methods of reconstructing Quaternary environments, effects of Quaternary environmental changes on landform, with special reference to North America, development and characteristics of glacial and nonglacial climates.
CR: Earth Sciences 4703, Geography 4150
LH: 3
PR: 6 credit hours in Physical Geography or in Archaeology at the 3000level, or permission of the instructor

4151 Palaeoethnobotany is a combined directed readings/laboratory course on palaeoethnobotany. Palaeoethnobotany concerns the recovery and analysis of archaeological plant remains as a basis for understanding human and plant interactions in the archaeological record. This course focuses on recent paleobotanical research in northeastern North America.
PR: ARCH 2450, ARCH 2480, or the permission of the instructor
4152 Zooarchaeology aims to introduce the student to the wide range of information that can be gleaned about past human groups from the animal remains they left behind after butchery, meals, toolmaking and other activities. Students will also gain practical experience in the identification and analysis of faunal remains.
CR: the former ARCH 4195 or the former Anthropology 4195
PR: ARCH 2450 or ARCH 2480
4153 Lithic Analysis explores the range of techniques used to study stone tools, including material and provenance identification, morphology and functional analysis, temporal and cultural typology, measurement, illustration, experimental manufacture, use wear and breakage patterns, refitting, debitage analysis and spatial distribution.
CR: the former ARCH 4196 or the former Anthropology 4196
PR: ARCH 2450 or ARCH 2480
4160-4169 Special Projects in Archaeology are courses which may be offered from time to time as demand arises. They may involve readings, seminars and actual analysis of archaeological collections on, for example: The Neolithic of Western Asia; the Rise of Civilization in Western Asia Scandinavian Prehistory; Palaeoethnobotany; and Technology and Material Culture.
PR: one of ARCH 2450, 2480, 2481, the former 2582, or permission of the instructor

4171 Iroquoian Archaeology is a lecture course examining the culture developments of the Iroquoian peoples of Northeastern Canada and the USA. Using both archaeological and ethnohistoric materials, this course will outline and explain the changing social, political and economic traditions of this culture group from their origins through the early contact period.
CR: the former ARCH 4190
PR: ARCH 2480
4172 Postcolonial Archaeology critically explores the history and contemporary practice of archaeology in light of the political claims of (formerly) subjugated groups. Topics to be discussed include archaeological antecedents of a postcolonial perspective (postprocessualism, critical archaeology), political economy of archaeology, interests of indigenous and other descendant groups, repatriation, national and transnational archaeologies, and community archaeology.
CR: the former ARCH 4192 or the former Anthropology 4192
PR: ARCH 2480 or the former ARCH 2582
4173 Archaeology of the Body explores the possibility of a more encompassing archaeology of embodied experience, starting from archaeological work on gender and recent reconceptualizations of the body in social, cultural and feminist theory. Topics to be discussed include the notion of bodily practice, biopolitics, sexuality, hybridity, violence, identity, sensory experience, disability and aging.
CR: the former ARCH 4191 or the former Anthropology 4191
PR: ARCH 2480
4182 History of Archaeology is an intensive study of the emergence and maturation of archaeology as a discipline within the social sciences, particularly in Western Europe and North America, during the 19th and 20th centuries. PR: ARCH 2480
4190-4199 Selected Topics in Archaeology and Prehistory is a seminar course focusing on recent theoretical and methodological developments in archaeological research.
PR: one of ARCH 2450, 2480, or the former ARCH 2582
4411 Archaeological Theory is an overview of the higher level conceptual frameworks that organize current archaeological research and interpretation. PR: ARCH 2480 and ARCH 4182

4500 Special Topic in Historical Archaeology is a consideration of current developments in methods, techniques, and theory in Historical Archaeology. PR: ARCH 2480, the former 2582, or permission of instructor

4994 Past Material - Advanced Research and Writing is a directed reading course and is a prerequisite for the Honours Essay in Archaeology (ARCH 4995). Readings will be chosen to complement students' specialization and to prepare them for the honours essay. Assignments will emphasize short essays and will provide students with the opportunity to improve their professional writing skills in the fields of archaeology, material culture and heritage.
PR: ARCH 2480
4995 Honours Essay is required as part of the Honours program.
PR: ARCH 4994

### 15.2.1 Work Terms

The following! Work Terms are a requirement of the Bachelor of Arts Co-operative Education Major or Honours in Archaeology.
300W Work Term 1 (Co-operative) will be the student's first work experience in a professional environment. Students are expected to learn, develop and practice the high standards of behaviour normally expected in the workplace. Students may be required to attend seminars on professional development.
CH: 0
PR: admission to the ACE Program; ARCH 3585 and 3586 or previous archaeological experience; a minimum overall average of $65 \%$; and permission of the ACE Coordinator and Head of the Department
400W Work Term 2 (Co-operative) builds on previous work term experiences and academic instruction as students will be assigned to a more challenging position. Students will now possess the necessary academic grounding and work experience to contribute to the problemsolving and management needs of a professional work environment. Students should observe and appreciate the attitudes, responsibilities and ethics normally expected of professionals, and should exercise greater independence and responsibility in their assigned work functions.
CH : 0
PR: admission to the ACE Program; ARCH 300W; a minimum overall average of $65 \%$; and permission of the ACE Coordinator and Head of the Department

### 15.3 Classics

In special circumstances, prerequisites may be waived with the permission of the Head of the Department.
A tentative list of upcoming Classics course offerings can be found at www.mun.ca/hss/courses.php.
Classics courses are designated by CLAS.

### 15.3.1 Greek

All sections of the Greek language courses below, except CLAS 4999, follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
1130 Introductory Ancient Greek I (same as Medieval Studies 1130) familiarizes students with the basics of the Ancient Greek language. Students will master the Ancient Greek alphabet, learn how to read simple narratives in Ancient Greek, and examine the connections between language and culture. Evaluation will focus largely on comprehension of written Ancient Greek. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 1130
1131 Introductory Ancient Greek II (same as Medieval Studies 1131) continues to familiarize students with the Ancient Greek language. Students will acquire a broad vocabulary, learn to read more complex passages of prose and poetry, and gain insights into key social concepts through study of language. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 1131
PR: CLAS 1130 or Medieval Studies 1130
2300 Intermediate Ancient Greek (same as Medieval Studies 2300) provides a deeper knowledge of the Ancient Greek language while offering a window onto the culture and society of Ancient Greece. Students will read selections from works of history, literature, philosophy and oratory in Ancient Greek. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 2300
PR: CLAS 1131 or Medieval Studies 1131
2302 Readings in New Testament Greek - inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).

3300 Advanced Ancient Greek (same as Medieval Studies 3300) provides advanced knowledge of the Ancient Greek language while offering a window onto the culture and society of Ancient Greece. Students will begin to apply their knowledge to the close reading and interpretation of major works of Ancient Greek literature. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.

CR: Medieval Studies 3300
PR: CLAS 2300 or Medieval Studies 2300
4300 Greek Tragedy
PR: CLAS 3300
4305 Greek Comedy
PR: CLAS 3300
4310 Greek Epic Poetry
PR: CLAS 3300
4315 Attic Orators
PR: CLAS 3300
4320 Greek Lyric Poetry
PR: CLAS 3300
4325 Greek Historians
PR: CLAS 3300
4340 Greek Philosophical Authors
PR: CLAS 3300
4355-4365 Special Topics in Greek Readings will have authors and readings selected by the Department.
PR: CLAS 3300
4370 Hellenistic Poetry
PR: CLAS 3300
4391 Special Authors
PR: CLAS 3300
4999 Honours Essay is a requirement of the Honours program. PR: CLAS 3300

### 15.3.2 Greek and Roman Studies

Medieval Studies 3000 may be substituted for a Greek and Roman Studies course in both the Classics degree programs (Honours, Joint Honours and general degree) and the Greek and Roman Studies degree programs (Honours, Joint Honours and general degree).
1001 Critical Reading and Writing: Classics in Popular Culture is an introduction to the ways in which modern popular culture represents and understands the ancient Greek and Roman world. Emphasis is placed on learning and practising critical reading and writing skills, including the comprehension and analysis of primary sources and secondary literature, and effective academic composition. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
1051 Gods in Classical Mythology is an introduction to some of the major myths of ancient Greece and Rome, with particular attention to the gods. The myths will be studied with reference to their social and historical contexts, literary and artistic representations, and modern theories of interpretation.
CR: the former CLAS 1050
1052 Heroes in Classical Mythology is an introduction to some of the major myths of ancient Greece and Rome, with particular attention to the heroes. The myths will be studied with reference to their social and historical contexts, literary and artistic representations, and modern theories of interpretation.
CR: the former CLAS 1050
1100 Life in Ancient Greece is a general illustrated survey of the origins and evolution of Ancient Greek Civilization. The course introduces the student to Greek social and political institutions, religion and myth, and achievements in art, philosophy, science and literature, as well as the influence of Ancient Greece on the modern world.
1200 Life in Ancient Rome is a general illustrated survey of the origins and evolution of Ancient Rome. The course introduces the student to social, political, and legal institutions, the growth of the Roman Empire, Roman art, literature, and religions, as well as Rome's pervasive influence in the modern world.
1900 Scientific Terms from Greek and Latin is an overview of the Greek and Latin origins of modern scientific and medical terminology.

2010 Greek Art and Architecture is an introduction, through illustrated lectures, to the study of the art and architecture of Ancient Greece.

2015 Roman Art and Architecture is an introduction, through illustrated lectures, to the study of the art and architecture of Ancient Rome.

2020 History of the Hellenistic World (same as History 2034) is a survey of the history of the Mediterranean world and the Near East from the death of Alexander the Great in 323 BC until the incorporation of the Kingdom of Egypt in the Roman Empire in 30 BC. Particular attention is given to the influence of the new monarchies on political, social and cultural developments in both Greek and non-Greek communities.
CR: History 2034
2025 Ancient Near Eastern History (same as History 2020) is an introduction to the history of ancient city-states, kingdoms and empires in Egypt and/or Mesopotamia, including economic, social, political and cultural developments.
CR: History 2020
2035 History of Classical Greece (same as History 2035) is a survey of Greek History from the Bronze Age to the death of Alexander the Great, with special reference to the social and political institutions of the fifth century B.C.

CR: History 2035
2041 History of the Roman Republic (same as History 2041) is a survey of Roman history from the early monarchy to the death of Julius Caesar, with special reference to the society and politics of the late Republican period.
CR: History 2041, the former CLAS 2040, the former History 2040
2042 History of the Roman Empire (same as History 2042) is a survey of Roman history from the death of Julius Caesar to the rise of Constantine, with special reference to the society and politics of the early Imperial period. CR: History 2042, the former CLAS 2040, the former History 2040
2055 Women in the Ancient World is an examination of the role of women in ancient Mediterranean civilizations from the perspectives of social and political history and culture. Critical assessments of relevant scholarship and methodologies will be included.
2156 Gladiators and the Arena: Spectacles of Death in Ancient Rome is an introduction to the violent and dangerous spectacles of ancient Rome: gladiatorial combat, beast fighting, executions, and chariot-racing. Emphasis will be placed on exploring the historical details of these spectacles, their significance in relation to aspects of Roman society, and representations of Roman gladiators, the arena, and chariot-racing in modern culture.
2701 History of Ancient Philosophy (same as Philosophy 2201, the former Philosophy 2701) is a survey of the origin and development of Western philosophy among the Greeks and Romans.
CR: Philosophy 2201, the former Philosophy 2701
2900 Science and Technology in the Ancient World is an introduction to significant developments in ancient Greek and Roman science and technology with emphasis on interpreting the primary evidence, including written sources (in translation) and material remains, assessing the historical context, and considering the nature of advancements.
2901 Technology and Culture in the Ancient World is an introduction to the applied technologies of the Greek and Roman cultures from ancient written sources and archaeological remains. It covers the time from the Late Bronze Age through the Late Roman Empire. Topics include machinery and gadgets, mass production, engineering, nautical technology, and labour.

2902 The Environment of the Greeks and Romans is an introduction to the environment in the ancient Greek and Roman world. It gives an overview of our sources of information, research methods, the technology of exploitation of natural resources and associated problems, and the environment in the mythical imagination of the ancient Greeks and Romans.

3010 Greek Religion (same as Religious Studies 3010) is a study of the role of religion in the private and public life of the Greek world.
CR: Religious Studies 3010, the former CLAS 3121, the former Religious Studies 3121
PR: it is strongly recommended that majors and minors take this course before taking 3000 and 4000 level courses
3020 Roman Religion (same as Religious Studies 3020) is a study of the role of religion in the private and public life of the Roman world.
CR: Religious Studies 3020, the former CLAS 3121, the former Religious Studies 3121
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

3030 Greece and Persia is a study of relations between Greece and Persia from the foundation of the Persian Empire to the death of Alexander the Great.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3040 Socrates and Athens is an introduction to and examination of Socrates within the context of Athenian political, social, cultural, intellectual, and religious life, and against the background of the fifth-century enlightenment and the sophistic movement.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000- level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

3050 Augustus and Rome is a course that examines the Age of Augustus (27 B.C. to A.D. 14) which witnessed not only Rome's greatest achievements in literature and art but also the replacement of republican government by a monarchy; this course, based on original sources, examines the period through its most powerful and influential figure.
PR: there is no prerequisite for this course but students are strongly
advised to have completed at least one 1000- level or 2000-level
Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

3150 Early Christian Thought: The First Five Centuries - inactive course.
3270 Christianity and the Roman Empire (same as History 3270, Medieval Studies 3270, Religious Studies 3270) is a study of the relationship between Christianity and the Roman Empire from the first to the fourth century.
CR: History 3270, Medieval Studies 3270, Religious Studies 3270
3405 Tragic Drama in Greece and Rome is a detailed examination of the tragic dramas of ancient Greece and Rome. A selection of plays by Aeschylus, Sophocles, Euripides and Seneca will be read in English translation. Topics to be discussed include the development of ancient tragedy, its literary, performative and thematic traditions, its representation of social and historical conditions, and its influence on later tragic drama.
CR: the former Classics 2805
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

3410 Comic Drama in Greece and Rome is a detailed examination of the comic dramas of ancient Greece and Rome. A selection of plays by Aristophanes, Menander, Plautus and Terence will be read in English translation. Topics to be discussed include the development of ancient comedy, its literary and thematic traditions, its representation of social and historical context, and its influence on later comic drama.
CR: the former Classics 2810
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level Greek and Roman Studies course before registering in any 3000-le or higher Greek and Roman Studies course
3415 Epic Poetry in Greece and Rome offers a detailed and in-depth study of the epic poetry of ancient Greece and Rome. The course will examine the poems of Homer, Apollonius of Rhodes and Virgil in English translation. Instructors may include additional poems. Topics to be discussed include the development of epic poetry, its literary traditions and its role in Greek and Roman society.
CR: the former Classics 2060
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000 - level or 2000 -level Greek and Roman Studies course before registering in any 3000-leyel or higher Greek and Roman Studies course

## 3420 Lyric Poetry in Greece and Rome-inactive course.

3500 Sport and Athletics in Ancient Society will trace the evolution of athletics and other forms of recreation in Greece and Rome, with emphasis on their religious, cultural, and social importance. Topics will include sports in Homer, the concept of arete, the Olympic 'ideal,' gladiatorial contests, Greek athletics and the Roman Empire.
3501-3510 Special Topics in Classics will have topics determined by the Department.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000- level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
3580 Bronze Age Archaeology of the Eastern Mediterranean - inactive course.
3600 Ancient Myth and Cult (same as Religious Studies 3600) develops the students' knowledge of myth and material culture by examining specific religious sites in the Greek and Roman world as foci of ritual practice. Students will learn to integrate knowledge of the physical remains with the literary and ritual evidence in order to obtain a more integrated understanding of religious life in ancient Greece and Rome.
CR: Religious Studies 3600
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000- level or 2000-level

Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

3700 The Ancient World in Film examines the representation of the history and cultures of the ancient world in film. A selection of films will be studied and extensive reference will be made to the ancient evidence which informs them. The ancient world's impact on modern Western society will be considered together with the film industry's recasting of the ancient world in response to modern social and historical developments.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level
Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
3710-3729 Special Topics in Classics: Harlow is available only as part of the part of the Harlow Campus semester.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000- level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
3900 Greek and Roman Medicine examines the medical theories and practices of the ancient Greek and Roman world by taking account of ancient texts (in translation) as well as evidence from material culture, including art and architecture. Topics may include the relationship between science and medicine, concepts of health and illness, the role of the healer, practical applications, gender differentiation of patients, and legacy of ancient practices.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000-level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
3901 Sailing the Wine-Dark Sea-Ships and Seamanship in the Ancient World is an introduction to ships and seamanship in the ancient Greek and Roman world. It gives an overview of our sources of information, research methods, the origins and technology of shipbuilding, types of vessels, navigation, nautical infrastructure, and the sea in the mythical imagination of the ancient Greeks and Romans.
4000 Seminar in Greek History and Society - inactive course.
4010 Seminar in Roman History and Society is a seminar in Roman History and Society.
PR: there is no prerequisite for this course but students are strongly advised to have completed at least one 1000- level or 2000-level Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
4020 Seminar in Greek Literature and Culture is a seminar in Greek Literature and Culture.
PR: there is no prerequisite for this course but students are strongly
advised to have completed at least one 1000-level or 2000-level
Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course

4030 Seminar in Roman Literature and Culture is a seminar in Roman Literature and Culture.
PR: there is no prerequisite for this course but students are strongly
advised to have completed at least one 1000- level or 2000-level
Greek and Roman Studies course before registering in any 3000-level or higher Greek and Roman Studies course
4100-4109 Special Topics in Greek and Roman Studies will have topics announced by the Department and may include field studies in topography, Greek and Roman art and architecture, archaeology, and related areas, to be held in the Mediterranean and other regions of Graeco-Roman influence. PR: permission of the instructor and the Head of the Department
4999 Honours Essay is a requirement of the Honours program.

### 15.3.3 Latin

All sections of the Latin language courses below, except CLAS 4999, follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
1120 Introductory Latin I (same as Medieval Studies 1120) familiarizes students with the basics of the Latin language. Students will learn how to read simple narratives and short poems in Latin and examine the connections between language and culture. Evaluation will focus largely on comprehension of written Latin. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 1120
1121 Introductory Latin II (same as Medieval Studies 1121) continues to familiarize students with the Latin language and Roman culture and society. Students will acquire a broad vocabulary, learn to read more complex passages of prose and poetry in Latin, and gain insights into key social concepts through study of language. All sections of this course follow the
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

Language Study Course Guidelines available at www.mun.ca/hss/ls. CR: Medieval Studies 1121
PR: CLAS 1120 or Medieval Studies 1120
2200 Intermediate Latin (same as Medieval Studies 2200) provides a deeper knowledge of the Latin language while offering a window onto the culture and society of Ancient Rome. Students will read selections from works of history, literature, philosophy and oratory in Latin. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 2200
PR: CLAS 1121 or Medieval Studies 1121
3200 Advanced Latin (same as Medieval Studies 3200) provides advanced knowledge of the Latin language while offering a window onto the culture and society of Ancient Rome. Students will begin to apply their knowledge to the close reading and interpretation of major works of Latin literature. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Medieval Studies 3200, the former CLAS 2205
PR: CLAS 2200 or Medieval Studies 2200
4202 Medieval Latin - inactive course.
4205 Latin Lyric Poetry
PR: CLAS 3200
4210 Latin Historians
PR: CLAS 3200
4215 Latin Orators
PR: CLAS 3200
4220 Latin Hexameter Poetry
PR: CLAS 3200
4225 Latin Epistolography - inactive course.
4235 Latin Philosophical Authors
PR: CLAS 3200
4240 Latin Drama
PR: CLAS 3200
4245 Latin Elegiac Poetry
PR: CLAS 3200
4250 Latin Satire
PR: CLAS 3200
4265-4275 Special Topics in Latin Readings will have authors and readings selected by the Department. PR: CLAS 3200

4291 Special Authors
PR: CLAS 3200
4999 Honours Essay is a requirement of the Honours program. PR: CLAS 3200

### 15.4 Communication Studies

For Communication Studies course descriptions see under English, Communication Studies

### 15.5 Economics

A tentative list of upcoming Economics course offerings can be found at www.mun.ca/hss/courses.php.
Economics courses are designated by ECON.
1010 Introduction to Microeconomics (same as the former ECON 2010) examines scarcity and opportunity cost. Demand and supply. Elasticity. Household demand: marginal utility. Household demand: indifference curves. Production functions. Short-run and long-run cost functions. Perfect competition in the short run and the long run. Monopoly. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
CR: the former ECON 2010
1020 Introduction to Macroeconomics (same as the former ECON 2020) covers national income accounting, aggregate income analysis, money, banking and foreign trade. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
CR: the former ECON 2020
2550 Economic Statistics and Data Analysis is an analysis of economic statistics and the use of economic data. A course designed to introduce students to the task of economic data collection, description and analysis. Emphasis will be on interpretation and analysis of data using computer
software programs. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020), and Statistics 2500 or equivalent

3000 Intermediate Micro Theory I is the basic microeconomic theory course; consumer demand, indifference curve analysis, theory of production and cost, factor substitution, and the theory of the firm under perfect competition and monopoly.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)
3001 Intermediate Micro Theory II is a continuation of basic microeconomic theory; the theory of imperfect competition, theory of factor pricing under various market structures, general equilibrium and welfare economics.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3010 Intermediate Macro Theory I is aggregate analysis including consumer, investment, government and international sectors, the role of money, determinants of aggregate supply, and the effects of autonomous behavioural changes and fiscal and monetary policies on unemployment, price levels and the balance of payments.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)
3011 Intermediate Macro Theory II is a consideration of modern theories of macroeconomics, dynamios, empirical evidence and simulation of the national economy. Emphasis on the availability and effectiveness of government policy instruments.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3030 International Economics is an intermediate course encompassing theories and empirical studies of global trade flows; the effects of trade barriers, and efforts at economic integration such as the North American Free Trade Agreement and the European Union; the Balance of Payments and its links to the foreign exchange markets; the importance of the exchange rate worldwide as a macroeconomic variable; and the causes and lessons of exchange rate crises. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the
former ECON 2020)
3070 The Structure and Problems of the Newfoundland and Labrador Economy is an analysis of the structure of the economy of Newfoundland and Labrador. Basic economic theory will be applied to current economic issues and problems in Newfoundland and Labrador
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)
3080 Natural Resource and Environmental Economics is application of economic analysis to renewable and non-renewable natural resource industries such as the fishery, forestry, and mining. Emphasis is given to the criteria for optimal resource use under various market structures and their implications for public policy. Issues of environmental resource management and pollution control will also be covered.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3140 Economic Analysis in Health Care evaluates the role of economic analysis to health and medical care. Topics in the application of cost effectiveness analysis [and cost-benefit analysis] to health care programs, as well as comparisons of the Canadian experience with other health care systems will be discussed.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3150 Money and Banking examines the operation of the money and banking system. Topics include the core foundations of money and banking, and how they can be applied to the Canadian banking system and also to an international context, such as worldwide financial crises and the interaction of central banks globally. Selected topics and emphasis will vary from year to year so as to reflect the evolution of the Canadian banking system and the global financial system. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3160 Financial Economics provides an analysis of the major building blocks of the modern theory of financial economics and their implications for decision-making. To reflect that modern finance is a branch of economics, emphasis will be on how general economic principles and analytical techniques can be applied across all finance sub-fields. Topics include the basic pillars in finance-intertemporal optimization, asset valuation, risk management-and selected issues that will vary each year.
CR: Business 4500
PR: Mathematics 1000 or its equivalent, ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020). Students are
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
recommended to take ECON 2550 or its equivalent prior to taking this course.

3360 Labour Market Economics is an intermediate course concentrating on Canadian labour issues. The course investigates the labour market decisions that workers face and the influence of government decisions. Course topics also include factors affecting a firm's demand for labour, wage determination in non-union market, the role of unions, the various structure of wages and wage differentials in the Canadian setting.
CR: the former ECON 4360
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3550 Mathematical Economics I examines linear algebra and differential calculus, with applications to economics.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020) and Mathematics 1000 or equivalent with a " B " standing, or Mathematics 2050

3551 Mathematical Economics II covers integral calculus, difference and differential equations, with applications to Economics.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020), and 3550

3600 Industrial Revolutions of the 18th and 19th Centuries - inactive course.

3610 International Economic History of the 19th and 20th Centuries inactive course.

3620 Canadian Economic History to the End of the 19th Century inactive course.

## 3630 Canadian Economic History in the 20th Century - inactive course.

3670 Applications of Choice Theory examines microeconomic choices made outside perfectly competitive markets. Its topics include areas to which choice theory has been applied, for example, the economics of labour, marriage, sport, entertainment, crime, gambling, and the consumption of addictive goods.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)

3711 Intergovernmental Relations in Canada - inactive course.
4000 Advanced Microeconomic Analysis is an advanced treatment of theoretical and applied microeconomic theory, including topics such as intertemporal choice, risk and information, game theory and competitive strategy, index numbers, public goods, externalities, input-output analysis, linear programming, duality theory and empirical microeconomic studies.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former
ECON 2020), and ECON 2550, 3000, 3001, 3010
4010 Economics of Development in Less Developed Countries-inactive course.

## 4011 Economic Planning and Development - inactive course.

4025 Public Expenditure is an analysis of the theory of public expenditure. Relationship to resource allocation and distribution of income. Market failure and the rationale for government intervention. Theory of public goods. Public choice mechanisms. Expenditure patterns in Canada. Public sector budgeting. Public enterprise pricing and investment rules. Introduction to cost-benefit analysis.
CR: the former ECON 4020
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4026 Taxation is an analysis of the theory of taxation. Relationship to resource allocation and distribution of income. Incentive effects of taxation. Tax incidence. Tax structure in Canada at federal, provincial and local levels.
CR: the former ECON 4020
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4030 International Trade is an advanced course in the theory and empirical tests of international trade, strategic trade policy and economic integration, taking a general equilibrium approach, and dispute resolution under the
rules of the World Trade Organization, and under the North American Free
Trade Agreement. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4031 International Monetary Problems is an advanced open economy international macroeconomics course covering the balance of payments, its links with the national accounts and foreign exchange markets; economic stabilization policies under flexible and fixed exchange rates; exchange rate determination; the open economy trilemma and its policy implications for the choice exchange regimes; international monetary problems in the context of
the increasing globalization of financial markets and proposals for reform in the light of exchange rate crises. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010, 3030
4040 Economics of Education - inactive course.
4050 Inflation: Theory and Policy - inactive course.
4060 Development of Economic Thought I is Adam Smith to Karl Marx. A study in the development of Classical Economics with emphasis on the contributions of Smith, Malthus, Ricardo, Mill and Marx.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4061 Development of Economic Thought II is Alfred Marshall to Keynes A study in the evolution of marginalism. Emphasis will be placed on the Economics of Marshall and Keynes. Institutional Economics, a parallel development, is also considered.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

## 4070 Forestry Economics - inactive course.

4080 Advanced Fisheries Economics - inactive course
4085 Advanced Environmental Economics is an advanced treatment of the environmental consequences of economic activities and the associated policy issues.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010
4090 Mineral and Petroleum Economics is an introduction to some of the theoretical economic problems and practical solutions involved in the exploration, development and production phases of mineral and petroleum mining in Newfoundland and Labrador.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4100 Industrial Organization and Public Policy is the study of the basic characteristics of structure, behaviour and performance of industry with particular reference to the Canadian economy. Relation of industrial structure to social purpose is examined, with an emphasis on public regulations of monopoly and the objectives and implementation of anticombines policy.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4120 Applied Welfare Economics and Cost Benefit Analysis investigates some current criteria of welfare theory found in the literature and then outlines the principles used in measuring changes in consumer and producer welfare. The theory of cost benefit analysis is examined and then the principles are applied to a variety of projects, some of which are proposed to take place in Newfoundland and Labrador.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former
ECON 2020), and ECON 2550, 3000, 3010
4140 Health Economics is an application of economic analysis to current issues in the organization, financing and utilization of health services.
PR: ECON 1010 (or the former ECON 2010) and ECON 1020 (or the former ECON 2020)
4150 Monetary Theory examines empirical studies in money. Readings in current literature. Monetary theory with applications to problems of employment and foreign trade.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4200 Game Theory is an introduction to game theory and strategic thinking. Ideas such as dominance, backward induction, Nash equilibrium, stability, commitment, credibility, and asymmetric information are discussed and applied to games played in class and to examples drawn from economics, politics, the movies, and elsewhere.
PR: ECON 3000

## 4361 Labour Market Theory and Income Distribution - inactive course.

4550 Econometrics I covers estimation of the general linear regression model with emphasis on fundamental theory and examples from published empirical research.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010

4551 Econometrics II covers further problems in econometric theory and technique: multicollinearity, autocorrelation, nonlinear estimation, and the identification and estimation of systems of equations. Published empirical research will be discussed and each student will be expected to perform an original empirical study.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), and ECON 2550, 3000, 3010, 4550

[^19]4999 Honours Essay is required as part of the Honours program.
PR: ECON 1010 (or the former ECON 2010), ECON 1020 (or the former ECON 2020), ECON 2550, 3000, 3010, and admission to the Honours program.

### 15.5.1 Work Terms

The following Work Terms are a requirement of the Bachelor of Arts and Bachelor of Science Co-operative Education Option only.
299W Work Term I follows the successful completion of Academic Term 2. For most students, it represents their first work experience in a professional environment and as such represents their first opportunity to evaluate their choice of pursuing a career in Economics. Students are expected to learn, develop and practice the high standards of behaviour and performance normally expected in the work environment. (A detailed description of each job is normally posted during the job competition.)
As one component of the Work Term, the student is required to complete a work report. The work report, as a minimum requirement should

1. analyse an issue/problem related to the student's work environment.
2. demonstrate an understanding of the structure of a professional report, and show reasonable competence in written communication and presentation skills. (Students should consult the evaluation form provided in the placement package.)
Late reports will not be graded unless prior permission for a late report has been given by the coordinator.
Seminars on professional development, conducted by Co-operative Education, are presented during Academic Term 2 to introduce and prepare the student for participation in the subsequent work terms. Topics may include, among others, work term evaluation, work report writing, career planning employment seeking skills, resume preparation, self employment, ethics and professional concepts, behavioural requirements in the work place, assertiveness in the work place and industrial safety.
CH: 0
LC: 0
PR: Admission to the Co-operative Education Option of the Bachelor of Arts or Bachelor of Science degree programs and successful completion of Academic Term 2.

399W Work Term II follows the successful completion of Academic Term 4. Students are expected to further develop and expand their knowledge and work-related skills and should be able to accept increased responsibility and challenge. In addition, students are expected to demonstrate an ability to deal with increasingly complex work-related concepts and problems. The Work Report, as a minimum requirement should

1. analyse an issue problem related to the student's work environment and demonstrate an understanding of practical application of concepts relative to the student's academic background,
2. demonstrate competence in creating a professional report, and
3. show competence in written communication and presentation skills. Late reports will not be graded unless prior permission for a late report has been given by the coordinator.
$\mathrm{CH}: 0$
LC: 0
PR: Admission to the Co-operative Education Option of the Bachelor of Arts or Bachelor of Science degree programs and successful completion of Academic Term 4.
499W Work Term III follows the successful completion of Academic Term 5. Students should have sufficient academic grounding and work experience to contribute in a positive manner to the problem-solving and management processes needed and practiced in the work environment. Students should become better acquainted with their discipline of study, should observe and appreciate the attifudes, responsibilities, and ethics normally expected of professionals and should exercise greater independence and responsibility in their assigned work functions.
The Work Report should reflect the growing professional development of the student and, as a minimum requirement, will
4. demonstrate an increased ability to analyse a significant issue/problem related to the student's experience in the work environment
5. demonstrate a high level of competence in producing a professional report, and
6. show a high level of competence in written communication and presentation skills.
Late reports will not be graded unless prior permission for a late report has been given by the coordinator.
$\mathrm{CH}: 0$
LC: 0
Admission to the Co-operative Education Option of the Bachelor of Arts or Bachelor of Science degree programs and successful completion of Academic Term 5.

### 15.6 English

Lists of texts and readings for courses may be obtained from the Secretary of the Department of English. Courses for which there is insufficient demand will not be given.

1. ENGL 1000 and 1090 are courses for students who have attained a standard in Level III English acceptable to the Department.
2. ENGL 1001, 1110, 1191, 1192, 1193 are courses which may be taken by students who have successfully completed 1000 or 1090.
3. ENGL 1000, 1001, 1090, 1191, 1192, 1193 are courses which may be taken by students who have successfully completed 1020 or the former 1030.
4. Students cannot receive credit for more than one of ENGL 1000 or 1090, or for more than one of 1001, 1110, 1191, 1192, or 1193.
A tentative list of upcoming English course offerings can be found at www.mun.ca/hss/courses.php.
English courses are designated by ENGL.
102F Foundation English is a non-credit course designed for students whose first language is other than English and whose knowledge and use of English do not meet the standards for entry ínto the regular first-year English courses.
CH: 0
LC: 4 hours of lecture plus one hour conversation class
LH: 1
UL: may not be taken concurrently with a 1000 -level English course
1020 Writing for Second Language Students I is an introduction to the use of English with emphasis on composition for non-native Englishspeaking students. This course is for students whose first language is not English and who have passed 102F or have attained a standard acceptable to the University on an approved language proficiency exam such as IELTS, TOEFL or CAEL. Students who have passed ENGL 1020 may take as their second English course one of ENGL 1021, 1090, 1191, 1192, or 1193. Students completing this course may elect to use it with ENGL 1021 to fulfill the Bachelor of Arts Language Study Requirement.

CR: the former ENGL 1030, ENGL 1110
1021 Writing for Second Language Students II develops skills in critical reading and writing of academic English, with emphasis on research and writing syntheses from sources, for non-native English-speaking students. Students completing this course may elect to use it with ENGL 1020 to fulfill the Bachelor of Arts Language Study Requirement.

## PR: ENGL 1020

1090 Critical Reading and Writing: Telling Stories is a foundational course for all ûniversity programs undertaken at Memorial University of Newfoundland, since understanding how stories work is fundamental lo all disciplines. This course focuses on the language we encounter in our reading and use to record our reading experiences. Emphasis is placed on critical reading and writing: analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/ hss/crw.
CR: ENGL 1000 or the former 1080
1110 Critical Reading and Writing in Rhetoric is an examination of prose texts such as essays, articles and reviews. Students write for different purposes and audiences. Emphasis is placed on critical reading and writing: analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw and build on foundational Critical Reading and Writing content delivered in ENGL 1090.
CR: ENGL 1020, the former ENGL 1030
PR: ENGL 1000, 1090, or the former 1080
1191 Critical Reading and Writing: Self and Society studies a variety of texts that explore the interaction between individual desires and social identities. Building on foundational critical reading and writing skills acquired in English 1090, students gain further experience with analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw and build on foundational CRW content delivered in ENGL 1090. Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the Breadth of Knowledge Requirement, unless pursuing a Major or Minor in English.
CR: ENGL 1110 and the former ENGL 1030, 1101, 1102, 1103
PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090
1192 Critical Reading and Writing: Imagined Places studies a variety of texts that explore imaginary (or imaginatively reconstructed) places and the responses of the humans who inhabit them. Building on foundational critical reading and writing skills acquired in English 1090, students gain further
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
experience with analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw. Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the Breadth of
Knowledge Requirement, unless pursuing a Major or Minor in English.
CR: ENGL 1110, and the former ENGL 1101, 1102, 1103
PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090
1193 Critical Reading and Writing: Ways of Reading focuses on the process of reading, on specific strategies and approaches that we take in our encounters with texts and on the ways we report those encounters. Building on foundational critical reading and writing skills acquired in English 1090, students gain further experience analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw. Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the Breadth of Knowledge Requirement, unless pursuing a Major or Minor in English.

CR: ENGL 1110 and the former ENGL 1101, 1102, 1103
PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090
$\mathbf{2 0 0 0}$ Major Writers to 1800 is an introduction to the work of major authors by detailed study of selected texts. There is an emphasis on the various skills of essay writing.
CR: ENGL 2005
PR: 6 credit hours in English at the 1000 level
2001 Major Writers from 1800 is an introduction to the work of major authors by detailed study of selected texts. There is an emphasis on the various skills of essay writing.
CR: ENGL 2007
PR: 6 credit hours in English at the 1000 level
2002 Drama is a survey of drama from the Greeks to the present day.
CR: ENGL 2350, 2351
PR: 6 credit hours in English at the 1000 level
2003 Poetry is a study of poetry, which aims to increase the student's critical understanding and appreciation of poetry, conducted through an examination of a wide variety of kinds and techniques.
PR: 6 credit hours in English at the 1000 level
2004 Short Fiction is a study of short fiction which aims to give the students, an appreciation of the short story as a literary form. The course will deal with the nature, history and development of short fiction by considering a variety of authors and stories.
PR: 6 credit hours in English at the 1000 level
2010 Introduction to Professional Writing requires students to analyze published essays for their aims, strategies, and discourses. Students practice writing as a process of discovery in the context of a learning community: for instance identifying questions to explore, free-writing, finding a focus, drafting, peer-editing, revising, editing. Each student produces a portfolio of revised, edited work.
PR: 6 credit hours in English at the 1000 level
2013 Twentieth Century Musicals (same as Music 2013) is a survey of twentieth-century musical theatre. Selected works, presenting different styles and periods, will be examined in detail. There will be a strong, required listening/viewing component to this course. The ability to read music is not required.
CR: Music 2013 and Music 3007
PR: 6 credit hours in English at the 1000 level
UL: cannot be taken for credit by students enrolled in the Bachelor of Music program

2122 Introduction to World Literature in English addresses contemporary literature consciously pre-occupied with global cultural identities and practices. The writers studied address transnational issues such as migration, environmental and human rights, travel and tourism, and the legacies of European colonialism. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

## PR: 6 credit hours in English at the 1000 level

2150 Modern Canadian Fiction is a study of representative Canadian fiction since 1930, including such authors as Ross, Buckler, Davies, Laurence, Atwood, Ondaatje and Findley.
CR: ENGL 2146
PR: 6 credit hours in English at the 1000 level
2151 New Canadian Fiction is a study of fiction of Canadian writers since the 1970s.
CR: ENGL 2146
PR: 6 credit hours in English at the 1000 level
2160 North American Aboriginal Literature will introduce Aboriginal
literature in a social, political and historical context. Beginning with the oral tradition (songs, narratives, legends, and orations), it will focus on different works by North American Aboriginal writers: poetry, drama, short stories and novels.
PR: 6 credit hours in English at the 1000 level
2211 The English Novel from 1800-1900 is a survey of representative texts from 1800-1900.
CR: the former ENGL 2200
PR: 6 credit hours in English at the 1000 level
2212 The Twentieth-Century British Novel is a survey of representative texts from 1900-2000.
CR: the former ENGL 2201
PR: 6 credit hours in English at the 1000 level
2216 American Literature from 1776-1865 is a survey of American fic non-fiction, drama, and poetry from the Revolution to the Civil War era.
CR: the former ENGL 2214, ENGL 2215
PR: 6 credit hours in English at the 1000 level
2217 American Literature from 1865-1945 is a survey of American fiction, non-fiction, drama, and poetry from the Civil War era to the end or the Second World War.
CR: the former ENGL 2213, the former ENGL 2214, ENGL 3215
PR: 6 credit hours in English at the
2218 American Literature since 1945 is a survey of American fiction, nonfiction, drama, and poetry from the end of the Second World War until the present.
CR: the former ENGL 2213, ENGL 3215
PR: 6 credit hours in English at the 1000 level
2390 Introduction to Modern English Structures is a practical introduction to the descriptive study of the English language with emphasis on syntax.
PR: 6 credit hours in English at the 1000 level
2400 History of the English Language to 1500 (same as Linguistics 2400) is a study of the early stages of the English Language: the Indo-European background; pronunciation and spelling, grammar, vocabulary and meaning in Old and Middle English.
CR: Linguistics 2400
PR: ENGL 2390 or the former Linguistics 2103
2450 Theatre (same as the former English 3350) is an introduction to principles of directing and acting, through lectures, discussion and stage production.
$A R$ : attendance is required
CR: the former English 3350
OR: three hours of workshops
2451 Physical Stage and Video Technique (same as the former English 3351) is an introduction to the fundamentals and vocabulary of design, lighting and stagecraft and film/ video craft, including sound, properties, etc. AR: attendance is required
CR: the former English 3351
OR: three hours of workshops
2600 Introduction to Middle English is a study of the language and literature of the later medieval period, excluding Chaucer.
PR: 6 credit hours in English at the 1000 level
2811 Science Fiction and Fantasy introduces the literary sub-genres of science fiction and fantasy. It examines the traditional canonical backgrounds from which popular literatures derive, studies the formulaic patterns and explores the place of science fiction and fantasy in popular culture.
PR: 6 credit hours in English at the 1000 level
2812-2820 (Excluding 2813 and 2815) Special Topics will have topics to be studied announced by the Department.
PR: 6 credit hours in English at the 1000 level
2813 Reading Images (same as Communication Studies 2813) introduces students to the field of visual culture and familiarizes them with both the vocabulary and the methodologies to examine images critically.
CR: Communication Studies 2813
PR: 6 credit hours in English at the 1000 level
2815 Introduction to Literary Theory and Criticism is an introduction to the study of contemporary theory and criticism with an emphasis on its application in the reading of literary texts.
PR: 6 credit hours in English at the 1000 level
2850 What is Film? introduces students to the critical analysis of film, focusing on how its elements create style and meaning.
PR: 6 credit hours in English at the 1000 level
2851 Introduction to Film Form and Film Theory develops students' visual literacy and introduces film theories focused on, for example, reproduction technologies and cultures of spectatorship.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=\mathrm{Prerequisite(s);}$ UL = Usage limitation(s).

PR: 6 credit hours in English at the 1000 level
2905 Introduction to Creative Writing will introduce students to the basic techniques and tools in the writer's tool box in order to write original fiction, non-fiction and poetry. This course will explore examples of literature from these three genres and give students the opportunity to participate in peerassessment and workshop critiques in order to develop the necessary skills for critical reading and creative writing.
PR: 6 credit hours of English including ENGL 1090 or the former 1080, or permission of the instructor

3001 Satire is a study of satire from classical times, examining major forms of satiric expression such as the monologue, the parody and the long narrative.
CR: ENGL 3245
PR: 3 credit hours in English at the 2000 level
3002 Medieval Books (same as Medieval Studies 3000, History 3000, Religious Studies 3000) is an examination of the development and role of the manuscript book during the Middle Ages. Topics covered will include book production and dissemination; authors, scribes and audiences; and various kinds of books (e.g. glossed Bibles, anthologies, books of hours, etc.) and their uses.
CR: Medieval Studies 3000, History 3000, Religious Studies 3000
PR: 3 credit hours in English at the 2000 level
3006 Women Writers of the Middle Ages (same as Medieval Studies 3006 and Gender Studies 3001) will study selections from the considerable corpus of women's writings in the Medieval period, as well as issues which affected women's writing. All selections will be read in English translation.
CR: Medieval Studies 3006 and Gender Studies 3001
PR: 3 credit hours in English at the 2000 level
3009 Literature and the Environment examines literary writing concerned with relationships between humans and the nonhuman world. Possible topics include human-animal relationships; Indigenous relationships to the land; social justice and environment; traditions of environmental writing in different time periods, locations, and genres; writing ecological catastrophe; imagining the Anthropocene.
PR: 6 credit hours in Critical Reading and Writing courses
3021 Medieval and Tudor Drama is a study of the development of preShakespearean drama, including representative cycle plays, morality plays, moral interludes, comedies, tragedies, folk plays, and royal entries.
PR: 3 credit hours in English at the 2000 level
3022 English Renaissance Drama is a study of the development of English drama (excluding Shakespeare) from 1580 to 1642.

CR: ENGL 4317
PR: 3 credit hours in English at the 2000 level
3100 The Poem Close Up explores in detail a wide range of poetry, using one or more of a variety of methods, contemporary and traditional, designed to lead an understanding of the thematic and technical of individual poems. PR: 3 credit hours in English at the 2000 level

3130 The English Novel to 1800 is a study of eighteenth-century English novels by such authors as Burney, Defoe, Fielding, Manley, Richardson, Sterne and Smollett.
CR: the former ENGL 2210
PR: 3 credit hours in English at the 2000 level
3152 Canadian Literature to 1918 is a study of the development of Canadian literature from its beginnings to the end of World War I.
CR: ENGL 3145, 3147, or the former 3150
PR: 3 credit hours in English at the 2000 level

## 3153 Canadian Literature, 1918-1945 - inactive cours

3155 Newfoundland Literature is a study of literature from the island of Newfoundland with emphasis on representative writers since 1900.
CR: ENGL 2155
PR: 3 credit hours in English at the 2000 level
3156 Modern Canadian Drama Drama is a study of a number of representative plays which illustrate the development of modern drama and theatre in Canada.

## CR: ENGL 4307

PR: 3 credit hours in English at the 2000 level
3157 Canadian Literature $1945-1970$ is a study of the development of
Canadian literature from 1945 to 1970.
CR: ENGL 3148, the former ENGL 3146, the former ENGL 3151, the former ENGL 3154
PR: 3 credit hours in English at the 2000 level
3158 Canadian Literature 1970 to the Present is a study of recent developments in Canadian literature.
CR: ENGL 3148, the former ENGL 3146, the former ENGL 3151, the former ENGL 3154
PR: 3 credit hours in English at the 2000 level

3160 Empire and After: Introduction to Post-Colonial Writing offers a broad overview of works which responds to the global phenomenon of British imperialism, and its persistent international consequences. Utilizing a cross-continental comparative frame, the course addresses the question: what happens when cultures collide? All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: 3 credit hours in English at the 2000 level
3161 Australian Literature focuses on contemporary writing by established Australian authors. It pays particular attention to the after effects of colonialism and the formulation of national identities.
PR: 3 credit hours in English at the 2000 level
3172 Irish Poetry focuses on major Irish poets, mainly of the twentieth century.
PR: 3 credit hours in English at the 2000 level
3175 Irish Literature focuses on major Irish writers in at least two genres. PR: 3 credit hours in English at the 2000 level
3190 Scottish Literature is a study of representative Scottish poetry and prose from the eighteenth to the twenty-first century including selected works by such writers as Boswell, Burns, Hogg, Scott, Stevenson, Spark, and Rankin.
CR: ENGL 3192
PR: 3 credit hours in English at the 2000 level
3200 Shakespeare is a study of tragedies and romances such as Romeo and Juliet, Julius Caesar, Hamlet, Othello, King Lear, Antony and Cleopatra, Macbeth, Pericles, The Winter's Tale, The Tempest.
PR: 3 credit hours in English at the 2000 level
3201 Shakespeare is a study of comedies and histories such as Love's Labour's Lost, The Taming of the Shrew, A Midsummer Night's Dream, The Merchant of Venice, Much Ado About Nothing, As You Like It, Twelfth Night, Measure for Measure, 1 Henry IV, 2 Henry IV, Henry V.
PR: 3 credit hours in English at the 2000 level
3260 American Drama is a study of plays by dramatists from a range of periods, organized by theme.
CR: ENGL 4308
PR: 3 credit hours in English at the 2000 level
3261 American Prose Fiction is a study of novels and/or short fiction from various periods in American history, organized by theme.
PR: 3 credit hours in English at the 2000 level
3262 American Poetry is a study or poetry and verse from various periods in American history, organized by theme.
PR: 3 credit hours in English at the 2000 level
3263 American Cultural Traditions focuses on the literature produced within a particular political or cultural community in the United States, such as African-American, Hispanic, Asian, Indigenous, feminist, LGBTQ, proletarian, and/or socialist.
PR: 3 credit hours in English at the 2000 level
3265 Hardboiled Fiction investigates the rich literary history of hard-boiled fiction through representative texts and critically explore how hardboiled aesthetic practices continue to get nuanced in relation to changing socioeconomic contexts.
PR: 3 credit hours in English at the 2000 level

## 3266-3274 Special Topics in American Literature will have topics to be

 studied announced by the Department.PR: 3 credit hours in English at the 2000 level
3460 Folklore and Literature (same as Folklore 3460) examines the interrelationships among folklore forms and literary genres, the influence of oral traditions on written literatures, and consider the theoretical issues raised by these interrelationships. The primary emphasis is on the interpretation of literature from the perspective of folk tradition.
CR: Folklore 3460, the former ENGL 4450, and the former Folklore 4450
PR: 3 credit hours in English at the 2000 level
3500 Introduction to Old English Language and Literature introduces students to the basic elements of Old English grammar and vocabulary through the practice of translating one or more texts from Old English into modern English and the study of the Old English corpus in modern translations.
CR: the former ENGL 250A/B
PR: 3 credit hours in English at the 2000 level, or enrollment in the

## Certificate in Ancient Languages

3600 Chaucer is a study of representative poems.
PR: 3 credit hours in English at the 2000 level
3710-3729 Special Topics in English: Harlow is available only as part of the Harlow Campus semester.
PR: permission of the instructor

[^20]3811 Reading The Lord of the Rings considers the various ways the text has been read; as escapist fantasy, as a moral guide, as a political treatise, as a religious tract, as ecological doctrine.
PR: 3 credit hours in English at the 2000-level
3812-3829 (Excluding 3813, 3816, 3817, 3819, 3820 and 3828) Special Topics will have topics to be studied announced by the Department.
PR: 3 credit hours in English at the 2000-level
3813 Theories of National Cinema examines films from various imperial, colonial, national and diasporic cinemas in the context of debates about what constitutes a national cinema. Students are normally expected to have taken at least one of English 2850 or English 2851.

3817 Writing and Gender II draws on a variety of writing to examine questions related to the study of gender. Possible topics may include the changing constructions of gender and the intersections of gender with race, class, nationality and sexuality.
PR: 3 credit hours in English at the 2000 level
3819 The Gothic offers an introduction to the Gothic mode in a selection of texts from the eighteenth century to the present. Topics covered may include the Gothic's recurrent themes of sin, sex, violence, and religion; its subversive response to dominant cultures and historical contexts; and its philosophical roots in sensibility, horror, and the sublime.
PR: 3 credit hours in English at the 2000 level
3820 Poetry of Newfoundland and Labrador focuses on the poetry of Newfoundland and Labrador. While the work of early writers will be considered, the emphasis is on the poetry of the twentieth century and of our own century.
PR: 3 credit hours in English at the 2000-level
3828 The Middle Ages and the Movies (same as Medieval Studies 3828) explores the ways medieval sources are represented in modern films, and how modern cultural and political concerns influence how these medieval sources are presented. Through a selection of medieval films and their historical and literary inspirations, we will see how films shape our presentday concepts of history, identity, freedom, knowledge, and creativity.
CR: Medieval Studies 3828
PR: 3 credit hours in English at the 2000-level
3830 Women Writers is a course setting women writers in the context of literary history.
CR: ENGL 2805, 3810
PR: 3 credit hours in English at the 2000 level
3840-3870 (Excluding 3843, 3844 and 3848) Special Topics will have topics to be studied announced by the Department.
PR: 3 credit hours in English at the 2000 level
3843 Introduction to Comics will familiarize students with the study of comics. This course will examine a large selection of comics and current theoretical debates surrounding the relation between word and image, in general, and the workings of graphic narrative, in particular.
CR: ENGL 2244
PR: 3 credit hours in English at the 2000 level
3844 Science Fiction - The Golden Age and Beyond will examine the development of science fiction from its beginnings to the present day. It will consider some of the major authors, theories, forms and concerns that have been the focus of the genre.
PR: 3 credit hours in English at the 2000 leve
3848 The Western introduces one of the world's most iconic and instantly recognizable genres. This course explores the fictional frontiers of the Wild West through classics and variants of the genre, showcasing examples that both establish and question myths of the West. In situating the texts alongside historical developments and changing attitudes, the course also situates them regionally along East-West/North-South axes, considering too the Western's position in Western literature.
PR: 3 credit hours in English at the 2000-leve
3900 Introduction to Creative Writing: Fiction is conducted as a workshop using models of contemporary writing and the students' own work. Each student will be required to submit work regularly.
CR: credit may be obtained for only two of ENGL 3900, 3901, and 3905
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.
3901 Introduction to Creative Writing: Poetry is conducted as a workshop using models of contemporary writing and the students' own work. Each student will be required to submit work regularly.
CR: credit may be obtained for only two of ENGL 3900, 3901, and 3905
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.

3902 Introduction to Creative Writing: Playwriting is conducted as a workshop using models of contemporary dramatic writing and the students' own work. Each student will be required to submit work regularly.
CR: the former ENGL 3842
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.

3903 Introduction to Creative Writing: Nonfiction is conducted as a workshop using models of contemporary writing and the students' own work. Each student will be required to submit work regularly.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.
3904 Writing Place is conducted as an online workshop for writers interested in exploring the possibilities for engaging with place through writing creative non-fiction.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.
3910 Investigative Writing will permit students to learn to draft and edit short investigative pieces; and they complete an article or essay, and an investigative project that attends to ethics guidelines, research, documentation, interviewing protocols, and writing and editing for a specific context. The course is conducted as a seminar using the students own work. Each student will be required to submit work regularly. Some work may be done collaboratively.
PR: Normally, submission of a portfolio specified by the instructor and permission of the instructor. Class size will be limited.
3911 Writing Satire uses models of contemporary satire as a basis for students' own work. Guest satirists will be invited to meet with students who will write satirical sketches, articles and/or plays based on their own experiences in response to current affairs and topical items of interest. Students will engage in at least one collaborative project.
PR: Normally, submission of a portfolio specified by the instructor and permission of the instructor. Class size will be limited.
3912 Songwriting uses models from early ballads to contemporary hits and near-misses as a basis for students' own work. Guest songwriters will be invited to meet with students to discuss their compositions. Students will analyse song lyrics, write their own songs and collaborate on a major class project. The ability to sing or play a musical instrument or to read or write sheet music, while desirable, is not required.
3913 Speechwriting (same as Communication Studies 3913) develops the student's ability to speak on all occasions, formal and informal, expected and unexpected. Students will deliver speeches of varying types and lengths on a regular basis throughout the semester.
CR: Communication Studies 3913
PR: 3 credit hours in English at the 1000-level
3920 Reviewing permits students to analyse and practice reviewing of three kinds: (a) performance; (b) film, TV, video; c) books.
PR: 3 credit hours in English at the 2000 level
4000 English Literature and History of Ideas I is a study of European thought and culture as they affect the history and development of English literature from the Middle Ages to the eighteenth century.

## PR: 3 credit hours in English at the 3000 level

4001 English Literature and the History of Ideas II is a study of European thought and culture as they affect the history and development of English literature from the eighteenth century to the present.
PR: 3 credit hours in English at the 3000 level
4010 Sixteenth-Century English Literature focuses on the prose and poetry of representative authors of the period and provides a critical overview of the literary, historical, social, political, and religious context.
PR: 3 credit hours in English at the 3000 level
4030 Seventeenth-Century English Literature focuses on the prose and poetry of representative authors of the period and provides a critical overview of the literary, historical, social, political, and religious context.
PR: 3 credit hours in English at the 3000 level
4040 Restoration and Early Eighteenth-Century British Literature is a study of selected works by such authors as Dryden, Swift, Pope, Fielding, and Lady Mary Wortley Montagu.
PR: 3 credit hours in English at the 3000 level
4041 Later Eighteenth-Century British Literature is a study of selected works by such authors as Boswell, Burney, Johnson, Smollett, and Sterne.
PR: 3 credit hours in English at the 3000 level
4050 British Romanticism I is a study of late eighteenth- and early
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nineteenth-century texts in their social, political, and cultural contexts, with particular focus on the first generation of Romantic writers.
PR: 3 credit hours in English at the 3000 level
4051 British Romanticism II is a study of late eighteenth- and early nineteenth-century texts in their social, political, and cultural contexts, with particular focus on the second generation of Romantic writers.
PR: 3 credit hours in English at the 3000 level
4060 Victorian Literature I is a study of selected works by such writers as Carlyle, Dickens, Tennyson, the Brownings, and the Brontës.
PR: 3 credit hours in English at the 3000 level
4061 Victorian Literature II is a study of selected works by such writers as Thackeray, Gaskell, George Eliot, Arnold, and the Rossettis.
PR: 3 credit hours in English at the 3000 level
4070 British Literature: Decadence and After is a study of late nineteenthand early twentieth-century texts in their social, historical, and cultural contexts.
PR: 3 credit hours in English at the 3000 level
4071 British Modernisms is a study of representative texts from 1920-1945 in their social, historical, and cultural contexts.
PR: 3 credit hours in English at the 3000 leve
4080 British Postmodern Literature and Beyond is a study of representative texts from World War II to the present in their social, historical, and cultural contexts.
PR: 3 credit hours in English at the 3000 level
4100 Critical Theory I is a survey of critical approaches to literature, from Plato to the end of the nineteenth century. Students are advised to take this course towards the end of their program.
PR: 3 credit hours in English at the 3000 level
4101 Critical Theory II is a survey of critical approaches to literature in the twentieth century. Students are advised to take this course towards the end of their program.
CR: ENGL 4105
PR: 3 credit hours in English at the 3000 level
4210 Shakespeare's English History Plays is an advanced course focusing on such plays as King John, Richard II, 1 Henry IV, 2 Henry IV, Henry V, 1 Henry VI, 2 Henry VI, 3 Henry VI, Richard III, Henry VIII.
PR: 3 credit hours in English at the 3000 level
4211 Shakespeare's Roman and Greek Plays is an advanced course focusing on such plays as Titus Andronicus, Julius Caesar, Antony and Cleopatra, Troilus and Cressida, Coriolanus, Timon of Athens, Cymbeline. PR: 3 credit hours in English at the 3000 level
4271 Topics in Early American Literature and Culture is an advanced seminar in early American literature focused on a key issue, concept, literary movement, or author.
CR: the former ENGL 4251, the former ENGL 4260
PR: 3 credit hours at the 3000 level
4272 Topics in Contemporary American Literature and Culture is an advanced seminar in contemporary American literature focused on a key issue, concept, literary movement, or author.
CR: the former ENGL 4261, the former ENGL 427
PR: 3 credit hours at the 3000 level
4275-4285 Special Topics in American Literature will have topics to be studied announced by the Department
PR: 3 credit hours in English at the 3000 level
4300 Modern Drama I examines representative plays from Ibsen to the present day, principally of the realist tradition.
CR: ENGL 3275
PR: 3 credit hours in English at the 3000 level
4301 Modern Drama II examines representative twentieth-century plays from the traditions of expressionism, surrealism, and the theatre of the absurd.
PR: 3 credit hours in English at the 3000 level
4302 Contemporary British Drama is a study of representative dramatic works of contemporary British drama.
PR: 3 credit hours in English at the 3000 level
4400 Directing is the analysis, production plans and execution of selected projects.
AR: attendance is required
PR: ENGL 2451 (or the former ENGL 3351) or permission of the instructor. Admission priority will be given to the student in the Diploma in Stage and Screen Technique.

4401 Producing the Play is a full semester working with a selected play, to culminate in public performance. Students will be required to participate fully
in all aspects of the production, except direction, which will be the responsibility of the instructor.
$A R$ : attendance is required
PR: admission priority will be given to the student in the Diploma in Stage and Screen Technique

4403 Etymology-History of English Words - inactive course.
4421 English Dialectology II (same as Linguistics 4421) is field-work and transcription; modern linguistic geography; structuralist dialectology; occupational dialects; other recent approaches.
CR: Linguistics 4421
PR: the former ENGL 4420, 3 credit hours in English at the 2000 level
4422 Style in Literature is about how your writing compares to other people's. This course is an opportunity to understand the meaning not only of what you write, but also how. The meaning is sometimes political on
large scale, so we will also learn various methods of measuring styles.
PR: 3 credit hours in English at the 3000 level
4500 Advanced Old English Language and Literature is a detailed study of one or more major texts in Old English, depending on student interest.
PR: ENGL 3500, 3 additional credit hours in English at the 3000 level
4600 Chaucer and His Contemporaries is an in-depth study of some of the major writers of the fourteenth century.
PR: 3 credit hours in English at the 3000 level. ENGL 2600 or 3600 is recommended

4601 Medieval Romance Literature is a study of representative texts of the medieval romance genre from the twelfth to the fifteenth century.
PR: 3 credit hours in English at the 3000 level
4605-4615 Special Topics in Medieval Language and Literature will have topics to be studied announced by the Department
PR: 3 credit hours in English at the 3000 level
4810 Angry Young Adaptation explores post-war, mid-twentieth-century literary works and their filmic adaptations that capture the socio-economic frustrations of the working class (mostly youth) in England, as well as their anger-fuelled ideological commitments to socialist ideals and the anarchistic undermining of figures of institutional authority.
PR: 3 credit hours in English at the 3000 level
4811-4818 (Excluding 4817) Special Topics will have topics to be studied announced by the Department
PR: 3 credit hours in English at the 3000 level
4817 Utopias and Dystopias in Literature is a study of representative literary utopias and dystopias, both classic and modern.
PR: 3 credit hours in English at the 3000 level
4819 Imagining Islands examines how island spaces are conceived in both historical and contemporary literary texts. Figured as utopias and dystopias, paradises and penitentiaries, islands have long proved a rich and malleable imaginative terrain for creative writers.
PR: 3 credit hours in English at the 3000 level
4821 Canadian Literature: Imagining Worlds is a study of some of the main concepts in Canadian culture up to World War II as they affect the history and development of Canadian Literature.
PR: 3 credit hours in English at the 3000 level
4822 Canadian Literature: Making it New is a study of some of the main concepts in Canadian culture since World War II as they affect the history and development of Canadian Literature.
PR: 3 credit hours in English at the 3000 level
4843 Graphic Memoir examines a broad spectrum of graphic memoirs taking into account theoretical developments in both comics' studies and autobiographical studies.
CR: ENGL 3841
PR: 3 credit hours in English at the 3000 level
4850 Contemporary Canadian Poetry is a seminar course in contemporary Canadian poetry. Students will have the opportunity to study collections by six English Canadian contemporary poets - not just new work by established older writers, but also first collections by younger writers. The work of poets from across Canada will be chosen.
CR: ENGL 3148
PR: 3 credit hours in English at the 3000 level
4851 Canadian Exploration Literature will examine Canada's early exploration and travel literature and show how it has shaped our contemporary fiction. Early texts may be studied from an anthology of exploration writings, such as Germaine Warkentin's Canadian Exploration Literature: An Anthology. Several contemporary novels will also be studied and may include Wayne Johnston's The Navigator of New York and John Steffler's The Afterlife of George Cartwright.
PR: 3 credit hours in English at the 3000 level
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4852-4860 Special Topics in Canadian Literature will have topics to be studied announced by the Department.
PR: 3 credit hours in English at the 3000 levels
4900 Book History and Print Culture I is an introduction to bibliographical and textual studies to 1800. Areas covered may include the book as a material object; the history of the book; manuscripts; the spread of printing; the hand-press period; editing of texts; the evolution of the library; origins of intellectual property; freedom of the press; aspects of literary detection, forgery and plagiarism.
PR: 3 credit hours in English at the 3000 level
4901 Book History and Print Culture II is an introduction to bibliographical and textual studies from 1800 to the present day. Areas covered may include the book as a material object; the history of the book; machine-press period; industrialization of printing; globalization of the book trade; intellectual property and copyright; electronic book; digital literacy; digital literatures.
PR: 3 credit hours in English at the 3000 level
4910 Advanced Creative Writing: Fiction is a workshop for students who wish to write publishable literary fiction. Students will be expected to produce at least 15,000 words during the semester. Regular participation is also required.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.

4911 Advanced Creative Writing: Poetry is conducted as a workshop uses models of contemporary writing and the students' own work. This course is designed to develop further the technical skill of those students who have reached a high level of achievement in the introductory creative writing course in poetry, English 3901 (or who have a body of work of exceptional accomplishment) and to help them move towards publication in literary journals and chapbooks.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.
4912 Advanced Creative Writing: Playwriting is conducted as a workshop using models of contemporary dramatic writing and the students' own work. Each student will be required to submit work regularly.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.

4913 Advanced Creative Writing: Nonfiction is conducted as a seminar using models of contemporary writing and the students' own work. Each student will be required to submit work regularly.
PR: Normally, admission to this course will be based on the instructor's evaluation of the student's writing in the form of a writing portfolio submitted in the weeks prior to the beginning of the course (refer to the Diploma in Creative Writing). Class size will be limited.
4914 Advanced Editing is editing for the workplace: An intensive course in drafting and editing. Students will be expected to work both individually and collaboratively.
PR: 3 credit hours in English at the 3000 level
4920-4930 Special Topics in Creative Writing will have topics to be studied announced by the Department.
PR: Normally, submission of a portfolio specified by the instructor and permission of the instructor. Class size will be limited.
4999 Essay for Honours Candidates is required as part of the Honours program.

5000 Instructional Field Placement is a 3 credit hour course which occurs upon completion of course work in the Diploma in Stage and Screen Technique. The curriculum emphâsis is on the application of acquired skills. Continuing the project-oriented structure built into the practical courses, students will be placed with existing projects in the professional communities of film, television, theatre or video.
AR: attendance is required
CH: 3
PR: ENGL 2450, 2451 (or the former 3350, 3351) and 4400, and two of ENGL 4401 and Communication Studies 3816 (or the former ENGL 3816) and Communication Studies 4402, (or the former ENGL 4402) with an overall average of $75 \%$ in these courses. Restricted to students in the Diploma in Stage and Screen Technique. Admission is by application to the Program Coordinator, normally at least three months before the beginning of the placement, and is limited to students who at the time of admission have completed the six courses listed above with an overall average of at least $75 \%$ and who already hold a first degree or are in their final year of a degree program as confirmed by the Office of the Registrar.
UL: can be used for credit only towards the Diploma in Stage and Screen

Technique

### 15.6.1 Communication Studies

A tentative list of upcoming Communication Studies course offerings can be found at www.mun.ca/hss/courses.php.
Communication Studies courses are designated by CMST.
2000 Critical Approaches to Popular Culture considers critical issues and approaches in the study of popular culture. It will explore the ways in which everyone is both a user of and is used by popular culture. A variety of critical approaches to studying popular culture will be examined: Production, Texts, Audience, and History.

2001 Introduction to Communication Theory provides an introduction to theoretical approaches to organization, use and manipulation of language, including semiotics, performativity, mass and group communications, sociolinguistics and interpersonal communication. We will examine notions of influence, rhetoric, social judgment, deception, subject formation, globalization and cultural hybridity within the field of communications.
PR: prior completion of CMST 2000 is encouraged
2813 Reading Images (same as English 2813) introduces students to the field of visual culture and familiarizes them with both the vocabulary and the methodologies to examine images critically.
CR: English 2813
PR: 6 credit-hours in English at the 1000-level
3000 Emerging Media: Social Media Platforms explores the historical, technological, economic and social dynamies associated with the rise of social media.
PR: English 1090 or permission of the instructor
3001 Media and Urban Life explores the theoretical, representational, and experiential intersections between modern media and urban cultures. The course will foreground how recent media theory has been shaped by important theoretical works in the study of urban societies.
3010-3020 Special Topics in Communication Studies will have topics to be studied announced by the Program Coordinator.

3816 Television Production (same as the former English 3816) is an introduction to the principles of television production.
AR: attendance is required
CR: the former English 3816
PR: English 2451 (or the former English 3351). Admission priority will be given first to students in the Diploma in Stage and Screen
Technique and then to students in the Major in Communication Studies.

3913 Speechwriting (same as English 3913) develops the student's ability to speak on all occasions, formal and informal, expected and unexpected. Students will deliver speeches of varying types and lengths on a regular basis throughout the semester.
CR: English 3913
PR: 3 credit hours in English at the 1000-level
4000 Advanced Communications Theory engages communication theories, such as interpersonal, organizational, intercultural, or international communication, seeking to understand how and why mediated communication works have found their explanatory power to be useful. The course will aim to analyze various communication theories, apply communication theories to everyday life, write a theoretical literature review, and form sound hypotheses or focused research questions to advance theory.
PR: CMST 2000 and 2001 and 9 additional credit hours chosen from Program and Regulations, Elective Courses, List A or B
4001 Seminar in Mass Communication and Visual Culture examines the ways visual culture shapes and is shaped by communication forms and processes.

4002 Media and the Environment explores the representational, technological, industrial, and socio-political dynamics associated with ecocritical media studies.

4010-4020 Special Topics in Communication Studies will have topics to be studied announced by the Program Coordinator.
4402 Producing the Documentary (same as the former English 4402) is a full semester working on a selected project, to culminate in the creation of a completed video. Students, working in groups, established by the Diploma in Stage and Screen Technique Program Coordinator, will be required to participate in all aspects of production.
AR: attendance is required
CR: the former English 4402
PR: English 2451 (or the former English 3351) and CMST 3816. Admission priority will be given first to students in the Diploma in Stage and Screen Technique and then to students in the Major in
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).

## Communication Studies.

### 15.7 English as a Second Language

011F Core Intensive English Program covers reading through a variety of types of texts, vocabulary development, writing development, and academic listening and note-taking skills. Students will be placed into appropriate sections following a placement test.

012F Speaking, Listening, and Culture includes development of speaking and listening abilities through a wide variety of tasks and communicative activities, including discussions, debates, conversation, role-plays, and presentations. Listening activities promote comprehension of rapid conversational English, while discussion topics enrich students' understanding of Canadian culture. Students will be placed into appropriate sections following a placement test.

### 15.8 Folklore

Folklore 1000 is the prerequisite for all other courses in Folklore, except Folklore 1050, Folklore 1060, and those courses crosslisted with other Departments.
A tentative list of upcoming Folklore course offerings can be found at www.mun.ca/hss/courses.php.
Folklore courses are designated by FOLK.
1000 Introduction to Folklore explores the role of tradition in communication, art and society. Reading assignments and audiovisual material will emphasize the use of folklore in context. Students will analyse traditions in their own lives through special assignments.
CR: the former FOLK 2000
1005 Critical Reading and Writing in Newfoundland and Labrador Studies emphasizes learning about how to identify, critically read, and analyze a variety of texts that explore the culture and traditions of everyday life in Newfoundland and Labrador. In addition, special attention will be given to the stages of the writing process, from prewriting exercises to drafts and revisions. All sections of this course follow CRW guidelines available at www.mun.ca/hss/crw.
1060 Folklore and Culture is an introduction to traditional expressive behaviour as cultural experience. Readings and lectures will explore the various meanings of "culture" from interdisciplinary perspectives and link them to areas of folklore such as children's folklore, material culture, and occupational folklife.
PR: while there is no prerequisite for this course, students should note that they will need to take Folklore 1000 (or the former 2000) before they can advance to other courses
2100 Folklore Research Methods introduces the resources, tools and methods that folklorists use for primary and secondary research, including interviewing and participant observation.
PR: it is strongly recommended that majors and minors take this course before taking 3000 and 4000 level courses
2230 Newfoundland Society and Culture (same as Sociology 2230, the former Sociology/Anthropology 2230, and the former Anthropology 2230) focuses on the social and cultural aspects of contemporary island Newfoundland.
CR: Sociology 2230, the former Sociology/Anthropology 2230, the former Anthropology 2230
UL: not applicable towards the Major or Minor in Anthropology
2300 Newfoundland and Labrador Folklore (same as the former Anthropology 2300) is a survey of the full range of folklore in the province, with an emphasis on community and regional identity.
CR: the former Anthropology 2300, the former FOLK 3420
UL: not applicable towards the Major or Minor in Anthropology
2401 Folklife Studies examines the interweaving of traditional elements in the tangible and intangible cultural heritage of various cultures. These may include holiday customs, rites of passage, folk religion, home remedies, clothing, food and art.
CR: the former FOLK 3500
2500 Oral Literature From Around the World (same as the former Anthropology 2500) focuses on the analysis of folk literature - narrative, poetry and song, drama, and speech from around the world - through textual, comparative and contextual methods. Special attention is given to traveling motifs that cross geographical boundaries and adapt to global contexts. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former Anthropology 2500, the former English 3400, the former
FOLK 3400, the former Sociology/Anthropology 3400
2700 Ethnography of the University allows students to develop their skills in cultural documentation as they record and analyze Memorial University of

Newfoundland's unofficial culture. Course material covers ethnographic practices and issues as well as the dynamics and history of campus life.

2800 Folklore and Tourism: Foodways, Music, and Ritual examines the role of folklore and folklorists in the global tourism industry. Students will study local practices of foodways, music, and ritual that are being refigured for tourist consumption in Newfoundland and Labrador, and beyond.
3001 Art, Architecture and Medieval Life (same as Archaeology 3001, History 3020, and Medieval Studies 3001) is an examination of the development of medieval art and architecture and of the ways in which they mirror various aspects of life in the Middle Ages. This course will include a discussion of art and architecture in the countryside, in the town, in the castle, in the cathedral and in the cloister.
CR: Archaeology 3001, History 3020, and Medieval Studies 3001
PR: it is recommended, but not obligatory, that students should have successfully completed one of the following courses: Archaeology
2480, FOLK 1000 or the former 2000, History 2320/Medieval Studies 2001, History 2330/Medieval Studies 2002, Medieval Studies 1000 or the former 2000.
3100 Fictional Worlds: The Folktale is a study of fictional folk narratives told worldwide. Students may be asked to read, collect, and/or analyze folktales in order to highlight the significance and function of oral fictional folk narratives as they are performed and understood in various contexts worldwide. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former FOLK 4200
3200 Music, Song and Tradition (same as Music 3017) introduces students to a wide range of traditional song. Students will hear and discuss local, regional and international examples. Ability to read music or familiarity with music theory not required.
CR: Music 3017, the former FOLK 2430
3250 Song Worlds: The Ballad examines traditional balladry (including subgenres such as tragic, comic, romantic, religious, and medieval ballads) in the contexts of global transmission, function, performance, and aesthetics. Differences in dealing with written literature and the literature of tradition will also be addressed. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former FOLK 4445
3300 Vernacular Drama is a survey of traditional drama and its study with an emphasis on North America and Great Britain from social function, performance, and aesthetic perspectives.
3350 Folklore of the Body examines how the body is socially constructed and how it is represented through folklore genres from narrative, to material culture and custom. It considers how culture is both inscribed on the body and how it is bodily performed.
CR: the former FOLK 3611
3360 Sex/Folklore/Power and Globalization is 1) an introduction to the many ways that sexual identities are displayed, developed, and categorized through informal and everyday cultural performances, i.e., folklore; 2) a study of how such performances in both local and international settings relate to various folklore genres, including folk language and narrative, music/song/ballad, material culture/space, and festival/ritual and continue to evolve through globalization; and 3) an examination of how social power structures are (de)constructed and negotiated through folk processes involving sexuality/sexual identities. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3450 Language and Play examines the role of play in the folklore of children and adults with particular attention to games, rhymes, proverbs and other small genres of wordplay.
3460 Folklore and Literature (same as English 3460) examines the interrelationships among folklore forms and literary genres, the influence of oral traditions on written literatures, and consider the theoretical issues raised by these interrelationships. The primary emphasis is on the interpretation of literature from the perspective of folk tradition.
CR: English 3460, the former English 4450, the former FOLK 4450
3601-3640 (Excluding 3606, 3612 and 3618) Special Topic in Folklore will have topics to be studied announced by the Department.
3606 Supernatural Folklore focuses on the ethnography of belief systems. Students examine patterns of belief and the features of supernatural folklore.
3612 Urban Legend and the Media provides an introduction to the study of one of the most rapidly expanding and exciting areas of folk narrative research, focusing on the main features and themes of urban legends. It examines how, when, where and why stories of this type are communicated via and bound up with a variety of media.

3618 Jazz and Blues: The Roots of Popular Music (same as Music 3018) is an overview of blues and jazz as traditional musical forms. Lectures and listening will illustrate the development of regional music cultures and generic styles. To better understand the shift of blues and jazz from regional
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).
to global performance contexts, the course will examine the effects of changing transmissional media, from predominantly sensory media through contemporary media technologies. A term paper concerning musical style will entail library research and aural analysis.
CR: Music 3018
3650 Artifacts from North American Contexts 1600-1900 (same as Archaeology 3650) provides students with practical experience in the analytical methods used to identify, date and interpret artifacts from 16001900 contexts in North America. Detailed discussions on manufacture, technology, form and function provide the necessary background for a better understanding of concepts relating to artifact identification, provenance, dating techniques, and other current issues. Practical, hands-on exercises will help reinforce weekly topics and teach students the fundamentals required to interpret artifact assemblages from the historic period.
CR: Archaeology 3650, the former Anthropology 3683
3700 Museums and Historic Sites - inactive course.
3710-3729 Special Topics in Folklore: Harlow is available only as part of the Harlow Campus semester.

3820 Folk Custom provides an introduction to the study of calendar, seasonal, occupational, and life-cycle customs, focusing on their analysis as symbolic behaviour.
CR: the former FOLK 3600
3830 Foodways focuses on dietary practices in a variety of regional traditions, considering both historical and contemporary approaches to the supply, storage, preparation and serving of food. The whole range of cookery and food habits - from the acquisition of raw materials to the allocation of portions - will be addressed from both theoretical and applied perspectives.
3850 Material Culture (same as Archaeology 3850) is an introduction to the study of material culture and the question of why objects are important to us. Using folklore and interdisciplinary approaches, we will look at objects as cultural products, question the influence of objects on behaviours, and address the role of objects in historical and ethnographic research.
CR: Archaeology 3850
3860 Vernacular Architecture same as Archaeology 3860 and History 3860) is a historical survey of vernacular architectural forms in various regions of North America, with attention to Newfoundland and Labrador materials. Issues discussed include the relationship of house form and culture, the concepts of antecedents, diffusion, innovation and evolution of building forms and technologies, and the siting of buildings in the landscape. Dwelling houses, outbuildings, churches and industrial vernacular architecture will be included.
CR: Archaeology 3860, History 3860
3870 An Introduction to the History of Western Architecture Since the Renaissance - inactive course.
3910 Traditions of Work concerns the development and role of tradition in occupational groups and work settings. Verbal and non-verbal codes including narratives, joking relationships, pranks, materia culture, and labour force will be examined in a variety of contexts.

3920 Folklore, Education and Community familiarizes students with the function of Folklore in the educational process. Emphasis will be on cultural transmission and cultural learning inside and outside the K-12 classroom.

3930 Folklore and Popular Culture is an introduction to the study of popular culture, the folk/popular continuum, and the role of folklore in media such as film, television, music, and art.
CR: the former FOLK 2400
3950 Gender and Traditional Culture is an introduction to the ways in which gender shapes and/or is shaped by traditional culture. Readings and lectures will explore the significance of gender for folklore collection and preservation, examine representations of gender in folklore forms, and analyse creations of gendered traditions.

4015 Cultural Resource Management (same as Archaeology 4015 and Geography 4015) is a study of cultural resource management: the definition and recognition of cultural resources, the application of policy in managing cultural resources, and the identification and consideration of contemporary issues in cultural resource management.
CR: Archaeology 4015, Geography 4015
OR: three hours of seminar per week
4100 History and Memory - inactive course.
4310 Studies in Newfoundland and Labrador Folklore studies rural and urban Newfoundland and Labrador with specific reference to a culture in transition. Folklore is examined as one of the channels through which a people maintain, change and adapt various cultural patterns.
CR: the former FOLK 3421
PR: FOLK 2300 or permission of the instructor

4400 Traditional Culture of French-Newfoundlanders - inactive course.
4410 Folklore of France - inactive course.
4420 French Folklore in the New World - inactive course.
4440 Music and Culture (same as the former Anthropology 4440, Music 4040, and the former Music 4440) examines traditional music as an aspect of human behaviour in Western and non-European cultures. Examination of the functions and uses of music; folk-popular-art music distinctions; and the relation of style to content. Outside reading, class exercises and individual reports will be required.
CR: the former Anthropology 4440, Music 4040, the former Music 4440
PR: completion of at least 24 credit hours of university course work
UL: not applicable towards the Major or Minor in Anthropology
4460 Folk Religion (same as Religious Studies 4460) examines how established global religions and new forms of spirituality manifest themselves and are religion as it is "lived" on a daily basis in a variety of local contexts worldwide. It focuses primarily on forms of belief and spirituality that are informally expressed. Drawing upon various cultural contexts, the course addresses such notions as space and time; metaphysical powers; religious material culture, music, and verbal art; and the role and power of the holy person. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: Religious Studies 4460, the former FOLK 4240
4470 Spaces and Places tackles the question of how globalization and modernity influence our attachments to locality, community, and region; how folklore has contributed to social constructions of place; how folklore is used to turn physical space into cultural place; how folklore must change to meet the needs of today's global and virtual worlds. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
4480 Oral History (same as History 4480) examines the narratives of everyday people who tell their life experiences. This course focuses on the collection and analysis of oral narratives and how they can be used to illuminate the past. It considers the power of these narratives to shape constructions of the present and future for both narrators and audiences.
CR: History 4480
4500-4520 Special Topic in Folklore will have topics to be studied announced by the Department.

4600-4615 Special Research in Folklore will be determined by the

## Department.

4700-4715 Directed Reading Course will be offered as determined by the Department.

4810 Documents Management (same as History 4810) is an introduction to the management of records and documents, both official and private.
CR: History 4810
400X Folklore in the Community Context - inactive course.
4998 Honours Comprehensive Examination may be written or oral, or a combination of both.
4999
4999 Honours Essay is required as part of the Honours program.

### 15.9 French

Students who have successfully completed one or more credit courses in French language will not subsequently be permitted to receive credit for courses not previously completed and judged by the Department to be of a lower level than those already completed with the following provisions:

- Students who successfully complete a 4 to 5 week summer bursary program may receive three unspecified credits at the first-year level. In order to receive transfer credits students must complete the Application for Transfer Credit Evaluation and submit it to the Office of the Registrar.
- Students who wish to return to a previously completed course to improve their standing may do so only with the permission of the Head of the Department.
- Students returning to the study of French after an absence should consult the Department to determine the appropriate level. Failing to do so may put them at risk of registering for courses beyond their level.
A tentative list of upcoming French course offerings can be found at www.mun.ca/hss/courses.php.
French courses are designated by FREN.
1500 Introductory University French I is a course for beginners and for students whose background in French is very weak. Students with a strong
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
background in high-school French should bypass 1500 and begin their University study with 1501, especially if they intend to proceed beyond the first-year level. Very well-prepared students may apply to the Department for permission to enter 1502 directly. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
1500 Introduction à la langue française, niveau universitaire I cours pour débutants et pour ceux dont les connaissances du français sont très faibles. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
CR: the former FREN 1010 or the former FREN 1011
LH: two additional hours of language laboratory work or conversation class, or both
PR: students may not register concurrently for more than one of FREN 1500, 1501 and 1502 except with the permission of the Head of the Department.
UL: permission to register for this course will not be given to students who have completed Français 3202 (High School French immersion)

1501 Introductory University French II is one of three consecutive credit courses in French language at the first-year university level, offering a complete overview of basic oral and written French. Students with a limited background in French should register for FREN 1500 and continue with 1501. Students with a strong background in high-school French should bypass 1500 and begin their University study with 1501, especially if they intend to proceed beyond the first-year level. Very well-prepared students may apply to the Department for permission to enter 1502 directly. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
1501 Introduction à la langue française, niveau universitaire II Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
CR: the former FREN 1050
LH: two additional hours of language laboratory work or conversation class, or both
PR: High School FREN 3200 or permission of the Head of the Department. Ex-immersion students should consult the Head of the Department before registering for this course. Students may not register concurrently for more than one of FREN 1500, 1501 and 1502 except with the permission of the Head of the Department.

1502 Introductory University French III is one of three consecûtive credit courses in French language at the first-year university level, offering a complete overview of basic oral and written French. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
1502 Introduction à la langue française, niveau universitaire III Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
CR: the former FREN 1051
LH: two additional hours of language laboratory work or conversation class, or both
PR: FREN 1501 with a grade of at least $60 \%$ or by permission of the Head of the Department. Students may not register concurrently for more than one of FREN 1500, 1501 and 1502 except with the permission of the Head of the Department. Very well-prepared students may apply to the Department for permission to enter 1502 directly.

2100 Intermediate French l is a course on composition, grammar and practice in oral skills. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls
2100 Français intermédiaire II traite de rédaction, grammaire et pratique orale. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 1502 with a grade of at least $60 \%$ or Passport Français 3302 with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent
2101 Intermediate French II is further work in composition, grammar and oral skills. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
2101 Français intermédiaire II est la continuation du travail de rédaction, de grammaire et de communication orale. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ Is.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 2100 with a grade of at least $60 \%$ or Passport Français 3302 with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent

2159 Advanced French for First-year Students I is primarily intended to build on the language skills acquired by students in immersion programs. Development of reading, writing, listening and speaking ability through practical oral and written exercises. Other qualified students may register with the permission of the Head of Department. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ Is.

2159 Français avancé pour étudiants de première année I ce cours est conçu principalement pour développer les compétences linguistiques des étudiants qui ont reçu leur formation dans les programmes d'immersion. La compréhension et l'expression écrites et orales seront développées au moyen d'exercices pratiques oraux et écrits. Les étudiants ayant des qualifications équivalentes peuvent s'incrire à ce cours avec la permission de la direction du départment. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
PR: primarily intended for students who completed immersion programs or with permission of the Head of the Department. FREN 2159 and 2160 are courses designed for former French immersion students as well as others with exceptional backgrounds in French, and are intended as an alternative to the 1500, 1501, 1502, 2100, 2101 sequence.
UL: may not be used to meet the requirements of a Major or Minor in French

2160 Advanced French for First-year Students II is an intensive review of French grammar with oral and written practice. Particular attention will be paid to ensuring precision in language use in both oral and written forms and to eradicating anglicisms. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
2160 Français avancé pour étudiants de première année II révision intensive de la grammaire et pratique de la langue écrite et parlée pour assurer la précision linguistique à l'oral ainsi qu'à l'écrit et supprimer les anglicismes. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/artshss/ls.
PR: FREN 2159 and 2160 are courses designed for former French immersion students as well as others with exceptional backgrounds in French, and are intended as an alternative to the 1500, 1501, 1502, 2100, 2101 sequence.
UL: may not be used to meet the requirements of a Major or Minor in French
2300 Phonetics is a practical introduction to French phonetics, including the International Phonetic Alphabet and phonetic transcription as well as corrective phonetics.
2300 Phonétique est une introduction pratique à la phonétique du français. Emploi des symboles de l'alphabet phonétique, transcription phonétique et phonétique corrective.
OR: may be offered in accelerated format outside the regular semester or session timeframe when being delivered as part of the Frecker Summer Program
OR: students may be required to attend a 50 minute weekly practicum
PR. FREN 1502 with a grade of at least $60 \%$ or Passport Français 3302 with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent
2601 Grammar and Reading will explore reading strategies in a variety of narrative and descriptive readings in French. This course will normally be taught in French
2601 Grammaire et texte propose l'exploration des stratégies de lecture qui faciliteront la compréhension de textes narratifs et descriptifs divers. Ce cours sera enseigné normalement en français.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 1502 with a grade of at least $60 \%$ or Passport Français 3302

- with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent

2602 Reading Practice will explore reading strategies in a variety of readings in FREN intended to inform or persuade. This course will normally be taught in French.
2602 Pratique de la lecture propose l'exploration des stratégies qui faciliteront la compréhension de textes informatifs et argumentatifs divers. Ce cours sera enseigné normalement en français.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 1502 with a grade of at least $60 \%$ or Passport Français 3302 with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent
2900 A Survey of Francophone Cultures places emphasis on oral comprehension and expression.
2900 Survol des cultures francophones met l'accent mis sur la compréhension et l'expression orales.
CR: the former FREN 2500
OR: may be offered in accelerated format outside the regular semester or session timeframe when being delivered as part of the Frecker Summer Program; students may be required to attend a 50 minute weekly practicum
PR: FREN 1502 with a grade of at least $60 \%$ or Passport Français 3302 with a grade of at least $85 \%$ or Grade 12 French Immersion with a grade of at least $80 \%$ or French 4283 with a grade of at least $85 \%$ or French 3283 with a grade of at least $85 \%$ or equivalent. Students who have obtained less than $70 \%$ in 1051 are, however, advised to complete FREN 2100 before attempting this course.

3100 Grammar and Textual Analysis is a revision of the French noun and
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
verb systems (morphology, number, gender, tense, aspect, mood, voice), including grammatical and stylistic textual analysis with special emphasis on the use of verbs in French. Vocabulary enrichment. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
3100 Grammaire et analyse de textes révision des catégories nominale et verbale du français (morphologie, nombre, genre, temps, aspect, mode, voix). Analyse grammaticale et stylistique des textes avec un accent particulier sur l'emploi du verbe en français. Travaux d'expansion lexicale. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 2101 with a grade of at least $60 \%$ and 9 additional credit hours in French at the second-year level, or permission of the Head of the Department

3101 Stylistics and Textual Analysis examines role and function of the parts of speech in French; semantic enrichment (synonymy, polysemy); tropes and figures of speech. Grammatical and stylistic textual analysis with special emphasis on these phenomena. Vocabulary enrichment. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
3101 Stylistique et analyse de textes rôle et fonction des parties du discours; exploitation sémantique (synonymie, polysémie); tropes et figures de style. Analyse grammaticale et stylistique de textes avec un accent particulier sur ces phénomènes. Travaux d'expansion lexicale. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum PR: FREN 3100

3102 French Language Studies at Nice I is a required course of Session I of the Canadian Third Year Program in Nice. The content of this course will be the equivalent of a language course at the third year level.
3102 Études de la langue française à Nice I est un cours obligatoire lors du premier du programme Canadian Third Year in Nice. Le contenu de ce cours correspond à un cours de langue de troisième année de l'université responsable de la coordination.
OR: students may be required to attend a 50 minute weekly practicum
PR: admission to the Canadian Third Year Program in Nice, 15 credit hours in French at the 2000 level, or permission of the Head of the Department

3103 French Language Studies at Nice II is a required course of Session II of the Canadian Third Year Program in Nice. The content of this course will be the continuation of the language course offered during the previous semester.
3103 Études de la langue française à Nice II est un cours obligatoire lors du deuxième semestre du programme Canadian Third Year in Nice. Le contenu de cours est la suite de ce cours de langue enseigné pendant le trimestre précédent.
OR: students may be required to attend a 50 minute weekly practicum
PR: admission to the Canadian Third Year Program in Nice and French 3102, or permission of the Head of the Department

3300 Rhetoric and Public Speaking is convincing and arguing in French. The course will be structured by rhetoric: memory, invention, disposition, elocution, diction. Various oral exercises.
3300 Rhétorique et art oratoire le discours et le dialogue. Le cadre du cours est la rétorique: mémoire, invention, disposition, élocution, diction. Exercices oraux variés.
OR: two and a half hours of instruction plus one 50-minute period of conversation class per week
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3302 History of the French Language (same as Linguistics 3302, Medieval Studies 3302) is a study of the origins of French, including the influence of Gaulish, Vulgar Latin, Frankish and the langue d'oc/langue d'oil division, a survey of the dialects, morphology and syntax of Old French and of the evolution from Old to Middle French, including phonology, morphology, syntax and vocabulary.
3302 Histoire de la langue française (identique à Linguistique 3302) Une étude des origines du français qui porte sur l'influence du gaulois, du latin vulgaire, du francique et de la division langue d'oc/langue d'oïl; survol des dialectes, de la morphologie et de la syntaxe de l'ancien français, ainsi que de l'évolution de l'ancien français au moyen français, en tenant compte de la phonologie, de la morphologie, de la syntaxe et du vocabulaire.
CR: Linguistics 3302, Medieval Studies 3302
PR: 15 credit hours in French and/or Linguistics at the 2000 level or permission of the Head of the Department; Classics 1120 or Medieval Studies 1120 is strongly recommended

3310 Phonology and Morphology of French (same as Linguistics 3310) is an examination of the phonological and morphological structure of French. Data from regional and non-standard varieties contrasted with data from standard French: formal rules to deal with observed regularities. Interactions of phonology and morphology in phenomena such as liaison. Derivational and inflectional morphology. Research articles on one or more of the topics
dealt with in the course will be assigned as readings, and a written report in French based on one or more of the articles is to be submitted as part of the term work. This course will normally be taught in French. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
3310 Phonologie et morphologie du français (identique à Linguistique 3310) est une étude de la structure phonologique et morphologique du français. Données des variétés régionales et non-standard en contraste avec le français standard: règles formelles pour rendre compte des regularités observées. Interaction de la phonologie et de la morphologie dans la liaison et d'autres contextes. La flexion et la dérivation. On prescrit des articles de recherche sur au moins un des thèmes à l'étude et un rapport rédigé en français sur l'un ou plusieurs des articles. Ce cours est normalement enseigné en français. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
CR: Linguistics 3310
PR: 15 credit hours in French and/or Linguistics at the 2000 level or permission of the Head of the Department
3311 Introduction to General Linguistics: Aspects of French Linguistic Theory (same as Linguistics 3311) is a practical examination of the French verbal system, with a thorough exposition of the systems of aspect, voice, tense and mood. The fundamental concepts of linguistics will form the framework of this exposition: the langue/parole distinction and its relationship to underlying and surface entities, language as activity and the generation of surface elements from underlying subsystems. This course will normally be taught in French.
3311 Initiation à la linguistique génerale: aspects de la théorie linguistique française (identique à Linguistique 3311) Étude pratique du système verbal du français et une exposition approfondie des systèmes de l'aspect, de la voix et des modes. Les concepts fondamentaux de la linguistique serviront de cadre à cette exposition: la distinction langue/parole et le rapport avec les entités sous-jacentes et de surface; le langage comme activité et la génération des éléments de surface à partir des systèmes sous-jacents. Ce cours sera normalement enseigné en français.
CR: Linguistics 3311
PR: 15 credit hours in French and/or Linguistics at the 2000 level or
3500 An Introduction to Prose Literature in French pays particular attention to the literatures of French Canada and France.
3500 Introduction à la prose de langue française une attention particulière sera accordée aux littératures du Canada français et de la France.

15 credit hours in French at the 2000 level or permission of the Head of the Department
3501 An Introduction to Drama in French pays particular attention to the literatures of French Canada and France.
3501 Introduction au théâtre de langue française une attention particulière sera accordée aux littératures du Canada français et de la France.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3502 An Introduction to Poetry in French pays particular attention to the literatures of French Canada and France.
3502 Introduction à la poésie de langue française une attention particulière sera accordée à la poésie du Canada français et de la France.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3503 Study of Theme is the study of a particular theme or of interrelated themes in selected French-language texts.
3503 Thématique un ou quelques thèmes reliés étudiés à travers un choix de textes d'expression française.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3504 Literary History is the study of one or more literary periods through selected French-language texts.
3504 Histoire littéraire l'étude d'une ou de quelques époques à travers un choix de textes d'expression française.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3506 French Cinema is a survey course designed to acquaint students with the major productions and trends in French cinema. The course is taught in French, and films screened will not necessarily have English subtitles. It is therefore recommended that students have a good aural comprehension of French.
3506 Cinéma francophone un cours d'initiation conçu pour familiariser l'étudiant avec les principales productions et directions du cinéma français. Ce cours est enseigné en français, et les films projetés ne seront pas nécessairement sous-titrés en anglais. II est donc recommandé que les étudiants aient une bonne compréhension auditive du français.
OR: may include film viewings scheduled outside of class time
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

3507 Advanced French Studies at Nice I is a required course of Session I of the Canadian Third Year Program in Nice. The Coordinator will choose among a French literature, linguistics or culture course taught at the student's university.
3507 Études françaises à Nice I est un cours obligatoire lors du premier du programme Canadian Third Year in Nice. La personne responsable de la coordination choisit un cours de littérature, de linguistique ou de culture enseigné dans son université.
PR: admission to the Canadian Third Year Program in Nice and 15 credit hours in French at the 2000 level, or permission of the Head of the Department

3508 Advanced French Studies at Nice II is a required course of Session II of the Canadian Third Year Program in Nice. The Coordinator will choose among a French literature, linguistics or culture course taught at the student's university.
3508 Études françaises à Nice II est un cours obligatoire lors du deuxième du programme Canadian Third Year in Nice. La personne responsable de la coordination choisit un cours de littérature, de linguistique ou de culture enseigné dans son université.
PR: admission to the Canadian Third Year Program in Nice and French 3507

3650 French Culture is an introduction to the culture of France. Practice in oral and written French.
3650 Culture française introduction à la culture française. Pratique de la langue orale et écrite.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3651 Quebec Culture is an introduction to the culture of Quebec. Practice in oral and written French.
3651 Culture québécoise introduction à la culture du Québec. Pratique de la langue oral et écrite.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3653 Canadian Francophone Culture Outside Quebec is an introduction to the culture of French-speaking regions of Canada other than Quebec. Practice in oral and written French.
3653 Culture franco-canadienne hors Québec introduction à la culture d'expression française du Canada à l'extérieur du Québec. Pratique de la langue orale et écrite.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department
3654 Francophone World studies the role, the diversity of the French language, its status as an international language and its challenges in the French-speaking world outside France and Canada. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/
IS IS.
3654 La Francophonie mondiale étudie le rôle, la diversité de la langue française, ses statuts et défis dans le monde francophone en dehors de la France et du Canada.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

3800 Interdisciplinary Topics in French Civilization examines a cultural aspect of the Francophone world through an interdisciplinary approach in order to better understand the dynamics at work.
3800 Étude interdisciplinaire de la civilisation française examine un fait culturel de la francophonie selon une approche interdisciplinaire dans le but de mieux comprendre les dynamiques qui l'animent.
PR: 15 credit hours in French at the 2000 level or permission of the Head of the Department

4100 Advanced French Expression is an intensive review of the stylistics of written French, including levels of expression and composition of texts with a Francophone audience in mind (correspondence, reports, etc.). Advanced oral practice. All sections of this course follow the Language Study Course Guidelines ayailable at www.mun.ca/hss/ls.
4100 Perfectionnement de l'expression pratique intensive de la stylistique du français écrit; exploration des registres; rédaction de textes en vue d'un lectorat francophone (correspondance, rapport, réclamation, etc.). Pratique du français oral, niveau avancé. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum PR: FREN 3100 and 3101 or FREN 3102 and 3103
4101 Translation and Comparative Stylistics is an introduction to principles and methods of translation from French to English and English to French. Comparative stylistics of French and English. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
4101 Traduction et stylistique comparée initiation aux principes et aux méthodes de la traduction (thème et version). Stylistique comparée du français et de l'anglais. Toutes les sections de ce cours suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum

## PR: FREN 3100 and 3101 or FREN 3102 and 3103

4120-4129 Special Topics in French language are advanced courses on specialized topics in French language. Subjects to be treated will be announced each year by the Department. All sections of FREN 4120 only follows the Language Study Course Guidelines available at www.mun.ca/ hss/ls.
4120-4129 Sujets spéciaux de langue française cours avancés portant sur des aspects spécialisés de la langue française. Les sujets traités seront annoncés chaque année par le Département. Toutes les sections de FREN 4120 seulement suivent le guide des cours de langue qui est consultable à www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum
PR: FREN 3100 and 3101 or FREN 3102 and 3103
4400 Traditional Culture of French-Newfoundlanders deals with the identity of French Newfoundlanders. It will examine the historical context that lead to the emergence of a distinct identity, contacts between Newfoundland and France and the origin of francophone communities on the West coast. The traditional ways of life, folklore and traditions of these communities and their evolutions during the 20th century will also be studied.
4400 Culture traditionnelle des Franco-Terre-Neuviens porte sur l'identité des Franco-terreneuviens. Il examinera le contexte historique qui a mené à l'émergence des Franco-terreneuviens comme entité dictincte, l'histoire des contacts entre Terre-Neuve et la France et l'origine des communautés francophones de la côte ouest. Le mode de vie traditionnel de ces communautés, leur folklore et traditions et leur évolution au cours du 20ième siècle seront également étudiés.
PR: FREN 3100 and 3101 or FREN 3102 and 3103
4610 Literary Movement I is French literary history through the study of a movement or trend in literature up to romanticism: courtoisie, libertinage, libre pensée (free thought), the baroque, humanism, classicism, romanticism, etc.
4610 Mouvement littéraire 1 histoire de la littérature d'expression française à travers l'étude d'un mouvement ou d'un courant littéraire jusqu'au romantisme (et indépendamment des genres): courtoisie, libertinage, libre pensée, baroque, humanisme, classicisme, romanticisme, etc.
PR: two of: FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508 or one course in that series with a grade of $80 \%$ or above
4620 Literary Movement II is French literary history through the study of a movement or trend in literature since realism: realism, naturalism, symbolism, surrealism, existentialism, feminism, postmodernism, the absurd, nouveau roman, roman du terroir, etc.
4620 Mouvement littéraire II histoire de la littérature d'expression française à travers l'étude d'un mouvement ou d'un courant littéraire à partir du réalisme (et indépendamment des genres): réalisme, naturalisme, symbolisme, surréalisme, existentialisme, féminisme, postmodernisme, absurde, nouveau roman, roman du terroir, etc.
PR: two of: FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508 or one course in that series with a grade of $80 \%$ or above
4630 Literary Genre I is a study of a genre from French-literature of different periods to be chosen among the traditional or canonical forms (poetry, narrative fiction, theatre): poem, epic, novel, short story, novella tragedy, comedy, drama.
4630 Genre littéraire I étude d'un genre littéraire à travers une littérature d'expression française et à travers les siècles; quelques genres dits traditionnels (poésie, romanesque, théâtre): poème, épopée, roman, conte, nouvelle, tragédie, comédie, drame.
PR: two of: FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508 or one course in that series with a grade of $80 \%$ or above
4640 Literary Genre II is a study of a genre from French-language literature of different periods to be chosen among other literary and popular genres such as: essay, tract, manifesto; memoirs, diary, autobiography; personal writing, fantasy, best sellers, detective novel, spy novel, science fiction, etc.
4640 Genre littéraire II étude d'un genre littéraire à travers une littérature d'expression française et à travers les siècles; les autres genres (littéraires et paralittéraires): essai, pamphlet, manifeste; mémoires, journal, autobiographie; littérature fantastique; paralittérature (best-sellers, policier, espionnage, science fiction, etc).
PR: two of: FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508 or one course in that series with a grade of $80 \%$ or above

4650 Literary Criticism - inactive course.
4650 Critique littéraire - cours désactivé.
4651-4659 (Excluding 4654) Special Topics in Francophone Culture are advanced courses on specialized topics in Francophone culture. Subjects to be treated will be announced each year by the Department.
4651-4659 (Excluding 4654) Sujets spéciaux en culture francophone cours avancés portant sur des domaines spécialisés de la culture de la Francophonie. Les sujets traités seront annoncés chaque année par le Département.
PR: FREN 3100, 3101 and one other third-year French course
4654 Identity and Globalization studies, through French-language texts, films and media, the concepts of identity, otherness and globalization and
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
the relations between different peoples they have embodied from the colonial era to today's globalization. Related concepts such as internationality (mondialité), whole-world (tout-monde) developed by thinkers from various fields, and the relational identity (identité-relation) that the globalized world requires will be explored. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
4654 Identité et Mondialisation étudie, à travers des textes, films et médias en français, les concepts d'identité, d'altérité et de mondialisation et les relations entre les peuples qu'ils ont traduites depuis la période coloniale jusqu'à celle de la mondialisation actuelle. Les concepts connexes de mondialité, tout-monde, développés par des penseurs de divers champs, de l'identité-relation que commande la mondialisation, seront explorés. Toutes les sections de ce cours suivent les Orientations des études internationales disponibles sur www.mun.ca/hss/IS.
PR: FREN 3100, 3101 and one other third-year French course
4660 Literary Theory - inactive course.
4660 Théorie littéraire - cours désactivé.
4810-4829 Special topics in French-language Literature are advanced courses on specialized topics in literature written in French. Subjects to be treated will be announced each year by the Department.
4810-4829 Sujets spéciaux de littérature d'expression française cours avancés portant sur des aspects spécialisés de la littérature d'expression française. Les sujets traités seront annoncés chaque année par le Département.
PR: two of: FREN 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508 or one course in that series with a grade of $80 \%$ or above
4900 Honours Essay I under the direction of their assigned supervisors, students will select an honours essay topic, prepare a research proposal, and submit a draft of at least one section of the honours essay. Students are expected to meet regularly with their supervisors.
4900 Dissertation I pour la spécialisation en français l'étudiant/e choisira un sujet de recherches en accord avec son directeur ou sa directrice de recherches, préparera une proposition détaillée et remettra un premier jet d'une partie de sa dissertation. Il ou elle devra rencontrer son directeur ou sa directrice de recherches régulièrement.
PR: admission to the honours program in French and permission of the Head of Department
4999 Honours Essay II under the direction of their assigned supervisors, students will complete the writing of their honours essay. Students are expected to meet regularly with their supervisors.
4999 Dissertation II pour la spécialisation en français l'étudiant/e continuera l'écriture de sa dissertation sous la direction de son directeur ou de sa directrice de recherches. Il ou elle devra rencontrer son directeur ou sa directrice de recherches régulièrement.
PR: completion of FREN 4900 with a minimum grade of $70 \%$

### 15.10 Gender Studies

A tentative list of upcoming Gender Studies course offerings can be found at www.mun.ca/hss/courses.php.
Gender Studies courses are designated by GNDR.
1000 Introduction to Gender Studies (same as the former WSTD 1000) considers gender, gender studies and feminisms as areas of exploration from historical, contemporary, transnational and interdisciplinary perspectives. The aim of this course is to provide a critical framework for thinking about questions relating to gender and other forms of social difference.
CR: the former WSTD 1000, the former WSTD 2000
1005 Critical Reading and Writing: Identities and Difference (same as the former GNDR 2005) builds foundational critical reading and writing abilities through an exploration of feminist scholarship about the construction of identities and difference in cultural discourse, representation, and institutions. Students learn the principles of scholarly analysis and the mechanics of academic writing. Coursework focuses on critically analyzing texts, evaluating sources, framing questions, developing an argument, and refining written work for Gender Studies and related fields. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: the former WSTD 2005 and the former GNDR 2005
2006 Genders and Sexualities introduces genders and sexualities from an interdisciplinary perspective. Students will explore the continuum of sex/ gender and sexual identities, and examine how these identities intersect with other aspects of identity, including (but not limited to) race, class, and (dis)ability.
2007 Girlhood and Girl Culture (same as the former GNDR 3002) critically engages with the expanding contemporary feminist scholarship on girlhood and girl cultures. It considers historical and contemporary constructions of girlhood in primarily Western contexts as they intersect with 'race', ethnicities, sexualities and class. Course materials will be used to explore static and changing dimensions of girlhood, including gender expectations
and identities; girlhood as possible sites of power; and claims about the emergence of 'grrrls' and 'new girls.'
CR: the former GNDR 3002, the former WSTD 3002
2010 Masculinities in Critical, Global Perspective engages theories of masculinities from a feminist perspective, in a variety of geographical and cultural contexts. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3001 Women Writers in the Middle Ages (same as English 3006, Medieval Studies 3006 and the former WSTD 3001) will study selections from the considerable corpus of women's writing in the Medieval period, as well as issues which affected women's writing. All selections will be read in English translation.
CR: English 3006, Medieval Studies 3006, the former Medieval Studies

## 3351, the former WSTD 3001

3003-3020 (Excluding 3008, 3009) Special Topics in Gender Studies (same as the former WSTD 3002-3020 excluding 3004, 3005, 3009, and 3015) will have topics announced by the Department.

CR: the former WSTD 3003-3020 excluding 3004, 3005, 3008, and 3009
PR: 3 credit hours in Gender Studies
3005 Feminist Texts, Theories and Histories (same as the former WSTD 3005) examines the development and dissemination of feminist thought through analyses of key texts and diverse media, and their connections to historical and contemporary debates within feminism.
CR: the former WSTD 3005
PR: 3 credit hours in Gender Studies
3008 Feminist Practices and Global Change (same as the former GNDR 4005 and the former WSTD 4005) examines, in considerable depth and detail, connections between feminist theories and activism for social and political change on a global scale. It examines how social movement activisms, particularly in their transnational feminist forms, are mobilized in different historical, cultural and geographic contexts; and are increasingly defined by linkages between the local, regional and global/transnational. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS
CR: the former GNDR 4005, the former WSTD 4005
PR: 3 credit hours in Gender Studies
3015 Indigenous Feminisms in Theory and Practice examines the growing body of Indigenous feminist scholarship that has emerged from North America in recent decades. It looks at a range of theoretical debates and activist practices taken up in this literature, which centers colonialism alongside gender (and other axes of social difference) as an analytic for understanding the lived realities of Indigenous women and their communities.
PR: completion of GNDR 1000 is advised but not required
3025 Gender, Race and Post-Colonialism in Global Contexts examines theories, themes and issues that have emerged from, and in response to, post-colonial studies in recent decades. This course focuses particularly on what this international body of scholarship contributes to understandings of the roles of gender, race and sexuality in historical and ongoing colonial processes as global phenomena with diverse manifestations at the continental. regional and local levels. Special focus will be given to the legacies of British colonialism worldwide. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: 3 credit hours in Gender Studies
3026 Fat Studies introduces fat studies scholarship and fat activism. with particular attention to how fat, fatness, fat bodies, and fat as an identity are historically, socially, medically, politically, and culturally constructed in Canada and beyond.
3100 Gendered Politics of Health (same as the former WSTD 3100) examines intersections of gender and health, recognising these to be politically shaped categories that have direct implications for individuals' lives. This course considers the ways that particular conceptualizations of gender, health and well-being are shaped and challenged and considers the role of individuals, institutions and states in structuring opportunities and challenges related to health.
CR: the former WSTD 3100
PR: 3 credit hours in Gender Studies
3500 Justice, Politics, and Reproduction analyzes key issues related to justice, politics and reproduction with particular attention to the ways that domestic law and politics, in Canada and other transnational locations, shape regulations and social expectations and practices.
PR: completion of Law and Society 1000 and/or GNDR 1000 are advised but not required

3710-3720 Special Topics in Gender Studies: Harlow (same as the former WSTD 3710-3720) is available only as part of the Harlow Campus Semester.
CR: the former WSTD 3710-3720
4000 Contemporary Feminist Issues (same as the former WSTD 4000) is
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
an interdisciplinary seminar in Gender Studies that identifies emerging debates in contemporary feminism and analyses complex and contentious issues and how they intersect and disrupt social constructions of gender.
CR: the former WSTD 4000
OR: 3 hour seminar per week
PR: 3 credit hours in Gender Studies at the 3000 level or permission of instructor

4001 Methods that Matter in Gender Studies (same as the former GNDR 3000) familiarizes students with basic tools and research skills for feminist enquiry in Gender Studies research. As a requirement of this course, students will be asked to design and carry out a research project.
CR: the former WSTD 3000 and former GNDR 3000
PR: 3 credit hours in Gender Studies at the 3000 level or permission of instructor

### 15.11 Geography

It is strongly recommended that all 2000-level core courses be completed before registration in 3000-level courses. All 2000-level core courses must normally be completed prior to registration in a 4000 -level course.
Specific prerequisites for courses may be waived only with permission of the instructor and the Head of Department.
A tentative list of upcoming Geography course offerings can be found at www.mun.ca/hss/courses.php.
Geography courses are designated by GEOG.
1050 Geographies of Global Change provides perspectives on the major geographical challenges and changes facing the contemporary globe, including: climate and environmental change, sustainability, human development, economic globalization, cultural change, and population and migration. Using the integrative skills of geographical analysis, the course prepares students for advanced study in geography and citizenship in the modern world. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
CR: credit may not be obtained for GEOG 1050 and any one of the former GEOG 1000, the former GEOG 1001, the former GEOG 1010, the former GEOG 1011

2001 Cultural Geography is an introduction to the study of culture in geography, emphasizing both the history of the field from classic studies of landscapes to contemporary scholarship and themes of recent importance. It explores the politics of cultural production and consumption; critical spaces of cultural production and consumption from around the world, including cities, landscapes, texts, media, performance, and identity; and concepts of everyday life, materiality, and space/place. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011
2102 Physical Geography: The Global Perspective is a study of form, process, and change in natural systems at and near the surface of Earth, viewed as human environment. Emphasis is on global and regional scales in the systematic study of climate, water, landforms and vegetation. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS and Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
LH: 3
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011, or students following a major in Environmental Physics
2105 Canada's Natural Environments and Landscapes examines the characteristics and development of the natural environments and landscapes of each of the major regions of Canada. The diversity of natural environments is illustrated through discussion of the climatic, hydrological, biogeographical, and geomorphic processes responsible for shaping the land. The impact of both gradual and rapid (catastrophic) changes on local, national, and global scales will be emphasized. This course is complementary to GEOG 3405; students are encouraged to take both.
CR: the former GEOG 3100
2195 Introduction to Geographic Information Sciences is an introduction to the fields of cartography, remote sensing, and geographic information systems (GIS). Geographic information collection, representation and analysis methods are the topics for the course. An emphasis is given to applications of maps and satellite images. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.

2302 Issues in Economic Geography covers issues and ideas in economic geography. The development of local, regional and global economies will be related to economic, cultural and resource factors at international scales. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS and Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011, or permission of the instructor

2425 Natural Resources is an introduction to the concepts of natural resources, environment and conservation: the nature and distribution of natural resources; methods of use, allocation and development of natural resources and the role of various physical, social, economic, political and technological factors influencing decision-making about resources.
CR: the former GEOG 3325
PR: GEOG 1050, or the former GEOG 1001, or the former GEOG 1011
2495 Regional Geography of Labrador is a holistic study of the Geography of Labrador, including the terrain, geology, Quaternary history, climate, vegetation, and fauna; the cultural geography of Labrador, including Innu, Inuit, NunatuKavut, and Settler people and communities; economic activities in Labrador, and the interaction of the Labrador economy within Newfoundland, Canada, and globally; the management of physical and human resources; and the geographic techniques used to investigate and understand Labrador's unique Geography.
CR: the former GEOG 3495
3015 Science, Technology, and Society (same as Sociology 3015) explores the relationships among science, technology, and society (STS). It is premised on the idea that science and technology affect our social, cultural, economic, and political lives. Equally, scientific research and technology development are shaped by their social, cultural, economic, and political contexts. This course draws upon the fields of anthropology, sociology, geography, history, and cultural studies, as STS is an interdisciplinary field.
CR: Sociology 3015
3110 Physical Geography of the Watershed - inactive course.
3120 Climatology is an analysis of the energy and moisture budgets and circulation of the atmosphere at the macro-scale together with an examination of resulting climate characteristics for selected world regions.
LH: 3
PR: GEOG 2102, Mathematics 1000
3140 Biogeography is the application of ecological concepts to the study of the spatial variations in the distribution of species. Laboratory work emphasizes terrestrial species distributions of the island of Newfoundland.
LH: 3
PR: GEOG 2102, Mathematics 1000
3150 Geomorphology (same as Earth Sciences 3700) is a study of the relationships between geomorphic processes and landforms. Practical work will involve collection of data and samples in the field and analytical laboratory techniques.
CR: Earth Sciences 3700
LH. 3
PR: GEOG 2102 or Earth Sciences 2905, Mathematics 1000. Sections of this course delivered by the Department of Geography do not require the Mathematics 1000 prerequisite.
3202 Introduction to Cartography is an introduction to the field of cartography and its different components, including: projections, generalization, cartographic design, data classification, topographic and thematic mapping.
CR: the former GEOG 2200
LH: 3. Laboratory exercises will utilize Geographic Information Systems software.
PR: 6 credit hours at the 2000-level
3222 Research Design and Quantitative Methods in Geography is an introduction to principles of research design, and to the use of quantitative techniques. This course provides students with a basic understanding of data collection, entry, and analysis and presentation skills most commonly used by geographers. Practical, computer-based exercises are an essential part of the course. It is strongly recommended that this course be completed before registration in a 4000-level geography course.
CR: the former GEOG 2220
LH: 3
PR: GEOG 1050, or the former GEOG 1011, or the former GEOG 1001 and at least 9 credit hours from GEOG 2001, 2102, 2195, 2302, 2425

3228 Field Methods in Geography is designed to introduce students to the practice of geography in the field. Throughout this course, the students will experience the field research process from the initial observation of a site, formation of research questions and methods, collection of primary data, research and analysis, and finally presentation of their findings to both academic and public audiences via reports, outreach activities, or presentations.
CR: the former GEOG 3226
LH: 3
PR: GEOG 1050 and one course at the 2000- level in Geography
3230 Field Course will normally be taken by Geography Honours students just prior to the Fall semester of their third year. The course will be held off campus and is designed to provide experience in instrument and field techniques in physical, economic and cultural Geography.
PR: permission of the instructor
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=\mathrm{Prerequisite(s);}$ UL = Usage limitation(s).

3250 Introduction to Remote Sensing is an introduction to digital image analysis, including many aspects of pre-processing and processing of airborne and satellite imagery.
LH: 3
PR: GEOG 2195, Mathematics 1000
3260 Introduction to Geographic Information Systems (GIS) introduces the principles of GIS as they relate to spatial data input, structures, management, integration, analysis and output. Laboratory exercises permit students to use GIS software and explore how it can be applied to a wide variety of disciplines and real world issues.
CR: the former GEOG 4251
LH: 3
PR: GEOG 2195, Mathematics 1000
3303 Location Theory - inactive course.
3320 Fisheries Geography - inactive course.
3340 Techniques of Regional Analysis is an introduction to some of the more common types of analysis of urban and regional systems.
PR: GEOG 2302 or GEOG 3303
3350 Community and Regional Planning and Development introduces students to regional planning and development theories, techniques and approaches. Understanding of networks of development actors at community and regional scales, methods of delineating regions, links between theory and practice in planning and development. Focus on Canadian experiences and a sustainable development perspective.
PR: GEOG 2302 or permission of the instructor
3405 Canada is a study of the regional geography of Canada, with emphasis on social, economic and political characteristics. This course is complementary to GEOG 2105; students are encouraged to take both.
CR: the former GEOG 2400
PR: GEOG 2001, 2102 and 2302; or permission of the instructor and the Head of the Department
3420 Globalization of Food examines the increasingly globalized nature of food consumption, production and trade. The course examines the positive and negative effects of globalization on the food system before exploring the proliferation of alternative food networks. These alternative food networks aim to re-localize and re-embed the food system and include organic food, fair trade, self-provisioning, and animal welfare amongst many others. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former GEOG 3907
3425 Geographical Analysis of Resources is the geographic study of contemporary North American issues in resources and their management. Emphasis will be placed on air and water quality issues, lands and forest resources, energy resources, and coastal zone resources. A number of substantive areas in resource analysis will be considered, including resource appraisal, landscape evaluation, and environmental impact assessment.
CR: the former GEOG 4400
PR: GEOG 2425 or equivalent
3510 Geography of the Seas is an introductory course in marine science and management treating the world's oceans as a global geographic unit. The course covers basic physical, geological and biological marine science and applications of basic science to management issues facing the oceans today. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: GEOG 2102 or GEOG 2425 , or permisssion of instructor
3610 Cultural Landscape is an investigation of a principal subject of study in cultural geography; the human imprint on the land. The course will include a detailed consideration of the origin of landscape studies in geography; newer approaches emphasizing visual and representational aspects of landscapes; and several diverse case studies, historical and contemporary, concerned with struggles over their definition.

## PR: GEOG 2001

3620 International Migration examines global population movements from a critical geographic perspective. This course applies a spatial lens to key topics surrounding migration, including labour and development; borders and immigration control, refugees and the politics of asylum; and citizenship, belonging, and place making. Students will develop skills in information seeking, critical judgment, and effective communication for a broad audience, in addition to gaining the knowledge base to navigate contemporary migration debates. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: GEOG 2001 or permission of the instructor
3701 Urban Geography is an examination of the evolution, structure and dynamics of cities and urban systems.
PR: GEOG 2302
3710-3729 Special Topics in Geography: Harlow will have topics to be studied announced by the Department.

PR: available only as part of the Harlow Campus semester
3800 International Political Geography is a geographic study of political ideas and processes. The course will consist of a historical discussion of the origins and trajectory of geopolitics, from the beginning of the 20th century to contemporary uses. Key themes in political geography, including strategy and statecraft, decolonization and nationalism, global technologies, and environmental security will be discussed. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: GEOG 2001
3900-3909 (Excluding 3907) Special Topics in Geography will have topics to be studied announced by the Department.
PR: permission of the instructor and the Head of the Department
3990-3999 Special Topics in Geography will have topics to be studied announced by the Department.
PR: permission of the instructor and the Head of the Department.
4010 Cultural Geography is concepts and methods in the study of cultural geography.
PR: GEOG 2001 and at least one of GEOG 3610, 3620, 3800. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.
4015 Cultural Resource Management (same as Archaeology 4015 and Folklore 4015) is a study of cultural resource management: the definition and recognition of cultural resources, the application of policy in managing cultural resources, and the identification and consideration of contemporary issues in cultural resource management
CR: Archaeology 4015, Folklore 4015
OR: three hours of seminar per week
PR: it is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000 -level courses
4030 Discard Studies covers the cultural, economic, and resource aspects of waste, pollution, and externalities. Topics include, but are not limited to: social justice, colonialism, toxicity, scale, spatialities and temporalities, economic development, and infrastructures as they relate to systems of waste. Both quantitative and qualitative methods are emphasized.

4040 Assessing Environmental Change provides a survey of common environmental monitoring and analysis techniques, and applies them to the study of a particular location. Students will gain practical experience with environmental sampling techniques and analytical methods targeted at identifying adverse impacts of human activity on the natural environment and nature on the built environment.
LH:3
PR: GEOG 3222 and one of GEOG 3120, 3140, 3250, or 3260
4050 Engaging Arctic and Northern Geographies explores the geography of global Arctic and Northern Regions from an integrative geographical perspective. Students integrate and apply concepts, themes, and methodologies developed over the Geography program in a hands-on, northern-focused research project. By focusing on a specific "hot topic" theme, students will also have the opportunity to examine the interactions and interdependencies between the human and the physical dimensions of northern geography across a variety of scales.
CR: the former GEOG 3905
PR: GEOG 2001, GEOG 2102, and at least 6 credit hours of Geography courses at the 3000 level or above

4060 Natural Hazards: People and Environments considers case studies involving select biological and medical; climatological; geophysical; hydrological; and meteorological hazards. There are no hazards without people. The emphasis is not only in how and where particular natural hazards develop, from a physical / exposure viewpoint, but also in the implications for risk management, emergency response, planning, and community sustainability. Aspects of social and community sensitivity and vulnerability will be emphasized.
CR: the former GEOG 4908
4107 Feminist GeoTechnologies (same as Sociology 4107) investigates the effects of technology in feminist social movements and technologies that exemplify feminist values and ideologies, particularly as they pertain to the Earth. Topics could include: ecofeminism and technology; assessing, designing, and building technologies from a feminist perspective; the gender politics of social-technological systems; information technologies in science; feminist geography; biotechnology and ecology; development in architecture and design. The course combines seminar discussions of reading with hands-on activities.
CR: Sociology 4107
PR: 9 credit hours in any combination of Sociology, Gender Studies, Geography, Communication Studies 2000, Communication Studies 2001
4120 Applied Climatology is analysis of the impact of climatic environments and meteorological conditions upon agriculture, forestry, the hydro industry and the marine sector. Climatological considerations in the planning and design of urban areas and buildings.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

IH. 3
PR: GEOG 3120
4141 Glacial Environments - inactive course.
4150 Environmental Change and Quaternary Geography (same as Archaeology 4150 and Earth Sciences 4703) covers methods of reconstructing Quaternary environments; effects of Quaternary environmental change on landforms, with special reference to North America; development and characteristics of glacial and non-glacial climates.
CR: Archaeology 4150, Earth Sciences 4703
LH: 3
PR: 6 credit hours in physical geography courses at the 3000-level; or permission of Head of Department. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4170 Advanced Biogeography examines the global patterns of species distributions and the processes that drive them. Laboratory work emphasizes the link between pattern and process at multiple spatial scales. LH: 3
PR: GEOG 3140
4190 Coastal Geomorphology is an advanced course in geomorphology of coastal regions in all climate zones. Covers reflective and dissipative beaches, barrier systems, coastal sand dunes, deltas, tidal flats, estuaries, reefs, bedrock and karst shorelines, ice-dominated shorelines, and influence of climate change and sea level change on coastal environments.
CR: the former GEOG 4180
LH: 3
PR: GEOG 3150 or permission of instructor. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4202 Advanced Cartography will provide students with advanced knowledge in computer-based cartography required to produce final geographic datasets and maps.
LH: 3. Laboratory exercises will utilize Geographic Information Systems software.
PR: GEOG 3202 or permission of instructor. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4220 Advanced Quantitative Methods - inactive course.
4250 Environmental Image Analysis is remote sensing techniques applied to various environmental problems. Techniques include selection of the system for data acquisition (airborne or satellite imagery), planning of a ground truth survey, and of data processing. Applications to high and low density urban areas, agricultural, forestry, coastal zone, oceanic, and environmental monitoring.
LH: 3
PR: GEOG 3250. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000 -level courses.

4261 Advanced Methods in Geographic Information Systems (GIS) explores the nature and use of advanced GIS algorithms, discrete and continuous data structures, computational methods and analysis of error for the purpose of analysing and modelling spatial patterns and processes. Laboratory exercises permit students to use GIS software to explore as well as develop problem solving and modelling skills for a wide variety of real world applications.

LH: 3
PR: GEOG 3260; Mathematics 2050; Computer Science 1001; (or
equivalent, with permission of instructor and the Head of Department). It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4290 Geographic Information Sciences Practicum is practical experience with the geographic information sciences fields of cartography, remote sensing or geographical information systems. Students will serve as interns in governmental, institutional or private agencies, or in non-profit organizations.
CO: GEOG 4202, 4250, 4261, and be enrolled in the Diploma in Geographic Information Sciences
LH: six hours per week or a total of 72 hours of research or laboratory work OR: six hours per week or a total of 72 hours of research or laboratory work
PR: GEOG 4202, 4250, 4261, and be enrolled in the Diploma in Geographic Information Sciences. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4300 World Fisheries: Current Discourse and Future Directions is a seminar course on the key concepts, principles and challenges in fisheries resources worldwide. Topics of discussion include the state of world fisheries, analysis of various management approaches and tools, and future scenarios for world fisheries. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

PR: 6 credit hours in Geography at the 3000-level or permission of Head of Department. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000 -level courses.

4320 Regional Development Seminar is focused on understanding the region and regional development in theoretical terms and in a policy context. The central question of the course is: how do we understand the region and regional development in a globalizing world? What are the policy options for people interested in making regional development work in a global economy? The case studies will cover both the developing and the developed world.
PR: GEOG 2302 or permission of Head of Department. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4405 Outdoor Recreational Resources and Planning is an introduction to the major themes and techniques in the study of outdoor recreation. A theoretical framework will provide a base for the evaluation of the complex issues involved in managing a physical resource for recreational purposes. North American examples will be emphasized.

## CR: GEOG 4909

LH: 3
PR: GEOG 2425 or the former GEOG 3325. It is strongly recommended that GEOG 3222 and the former 3226 be completed before
registration in 4000-level courses.
4410 Research Seminar in Resources offers the opportunity to undertake advanced work in a number of resource sectors such as energy, fisheries, forests, lands, air and water. The emphasis will be on learning through experience. Students will be expected to initiate and complete suitable research projects in close consultation with faculty involved.
PR: GEOG 2425 or the former GEOG 3325. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.
4500 Engaging the Environmental Humanities (same as History 4500) explores the role of the environmental humanities in a setting beyond the traditionally defined class-room. While the initial weeks focus on providing students with the tool-kit and theoretical framework for engaging the environmental humanities, the course is mainly driven by projects designed and executed by students in collaboration with community partners.
CR: History 4500
PR: enrolment in the Diploma in Environmental Humanities or permission of instructor
4600 Historical Geography is a study of concepts and methods in historical geography. The field concerned with geographies of the past and their relation to the present. Themes will include the history of geography as a discipline, particularly its relevance to imperialism and state power; changing relationships between humans and the natural environment; and histories of the spaces of social life and human identity.
PR: GEOG 2001 and at least one of GEOG 3610, 3620, 3800. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

## 4640 Historical Geography of Canada - inactive course.

4650 Conservation in Biology and Geography (same as Biology 4650) is an examination of how biological and geographical principles can be applied to conserving biological diversity in the natural world under conditions of exploitation and habitat loss. Special emphasis will be given to relevant provincial examples.
CR: Biology 4650
OR: 3 hours of seminar/discussion group per week
PR: 30 credit hours in either Biology or Geography and permission of the course coordinator. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4700 Adaptive Cities and Communities will provide students with the opportunity to immerse themselves in the analysis of a small number of problems related to contemporary urban studies and community planning. Topics include but are not limited to: adaptable economies, socio-cultural change, northern cities, governance, climate change, and the built environment.
PR: GEOG 3701, or 3350
4900-4918 Special Topics in Geography will have topics to be offered announced by the Department of Geography.
PR: permission of the instructor and the Head of the Department of Geography. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000 -level courses.

490A Geography in Action I is the first half of a two semester linked course, built around geographyrelated issues that integrate natural and social science perspectives. Each year, students will address specific challenges faced by a client, NGO, or research group in the province. Through this process, students will reflect on the conceptual and practical challenges faced by practicing geographers.
$\mathrm{CH}: 1$
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

CR: the former GEOG 4990
PR: GEOG 3222; GEOG 3228 or the former 3226
490B Geography in Action II is the second half of a two semester linked course, built around geography-related issues that integrate natural and social science perspectives. Each year, students will address specific challenges faced by a client, NGO, or research group in the province. Through this process, students will reflect on the conceptual and practical challenges faced by practicing geographers.
CH: 2
CR: the former GEOG 4990
PR: GEOG 490A
4919 Integrative Practicum in Geographic Information Sciences is an applied or research project integrating aspects of cartography, geographical information systems and remote sensing. Students will have access to the GISciences Research Laboratory to complete their project. This is the capstone course for the students registered in the Diploma in Geographic Information Sciences program. It will involve the knowledge and experiences acquired over the years in the program.
CO: GEOG 4202, 4250, 4261, and be enrolled in the Diploma in Geographic Information Sciences
LH: six hours per week or a total of 72 hours of individual research or laboratory work
OR: six hours per week or a total of 72 hours of individual research or laboratory work
PR: GEOG 4202, 4250, 4261, and be enrolled in the Diploma in Geographic Information Sciences. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in 4000-level courses.

4999 Dissertation Honours Degree is required of the Honours degree.
PR: Admission to the Honours program. It is strongly recommended that GEOG 3222 and the former 3226 be completed before registration in $4000-\mathrm{level}$ courses.

### 15.12 German

The Department offers several courses in Germany during the Spring/Summer semester. See the Departmental web page at www.mun.ca/german for details on the German Field School.
A tentative list of upcoming German course offerings can be found at www.mun.ca/hss/courses.php.
German courses are designated by GERM.
1000 Elementary German I is intended to give beginners a basic knowledge of the spoken and written language and culture of the Germanspeaking countries. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former GERM 1002
1001 Elementary German II is a continuation of Elementary German I with the same basic text. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former GERM 1003

## PR: GERM 1000

1010 Critical Reading and Writing: Hansel, Gretel, and the Big Bad Wolf introduces students to the German story-telling tradition from the Middle Ages to the present. Students will learn how to identify, critically read, analyse and evaluate arguments using rational judgement and appropriate rhetorical techniques and how to construct logically sound academic essays, incorporating the words and ideas of others. The communicative advantages of identifying an audience, the use of effective tone, word choice, and sentence patterns will also be covered. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/ hss/crw.

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\text { PR: GERM } 1000 \text { is encouraged but not required }
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2010 Intermediate German I is a completion of the fundamentals of the German language, with a continued strong cultural component. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 1000 and GERM 1001 or equivalent
2011 Intermediate German II is a grammar review and introduction to literature. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 2010 or consent of the Head of the Department
2030 Reading German I gives training in reading scholarly German for senior undergraduate and graduate students with no previous knowledge of German, for whom this work is recommended or required by other departments or faculties. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.

2031 Reading German II is a continuation of Reading German I. In this course an attempt will be made to meet individual requirements. All sections
of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 2030
2510 Intermediate Composition and Conversation I aims to increase fluency in speaking and writing German. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 1000 and 1001
2511 Intermediate Composition and Conversation II: Field School is a continuation of Intermediate Composition and Conversation I.
OR: includes a 4 - week field school in Germany in August, which
lengthens the time frame for the course by approximately two weeks
PR: GERM 1001 and consent of the Head of the Department
2900 Introduction to German Culture I is a study of the major cultura trends and movements of German-speaking Europe to the beginnings of the modern age. Lectures are given in English.
2901 Introduction to German Culture II is a study of the major cultural trends and movements of German-speaking Europe in the modern age. Lectures are given in English.

3000 German Film I is a survey of German film from the beginnings to 1945.

3001 German Film II is a survey of West German film from 1945 to 1990. 3002 Post-Wall Cinema is a study of German cinema from 1990 to the present. It addresses a number of issues that are clearly identified with a post-Wall, unified Germany, such as German unification itself, the new German comedy of the 1990's, the transnationalization of German cinema, the treatment of the Nazi and the Communist past, the rediscovery of the social as a narrative focus, and on the evolving cinematographic directions taken by contemporary German film. The movies are subtitled and lectures and readings are in English.
3003 DEFA Cinema of East Germany is an examination of East German cinema through its feature films addressing issues in the context of Germany's divided status and its split screen from 1946 to 1990.
3004-3009 Special Topics in German Studies I will have topics to be studied announced by the Department.
3005 West to East: Aspects of the German Intellectual Influence on Russia (same as History 3005 and Russian 3005) examines the fluidity of ideas across geo-political borders, languages and cultures, by exploring how the German intellectual discourse was received and reinterpreted by Russians in their literary, artistic and cultural dialogue. Ideas about the Romantic Hero become conflated with theories involving the Will, the Nietzschean Superman and the Proletarian Revolutionary, personified and embodied in what some scholars characterize as political/cultural Gods (Lenin, Stalin, Hitler).
CR: History 3005, Russian 3005
3010 Advanced German I aims at a high level of accomplishment in German pronunciation, composition and translation through practice in the spoken language, written exercises and the reading of more advanced literary material. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 2010 and 2011
3011 Advanced German II is a continuation of Advanced German I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 3010 or consent of the Head of the Department
3510 Advanced Composition and Culture: Field School aims to increase accuracy and fluency in written and spoken German with emphasis on culture. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
OR: includes a 4-week field school in Germany in August, which
lengthens the time frame for the course by approximately two weeks
PR: GERM 1001 and consent of the Head of the Department
3511 Advanced Composition and Conversation: Field School aims to increase accuracy and fluency in written and spoken German with emphasis on grammar review. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
OR: includes a four week field school in Germany in August, which
lengthens the time frame for the course by approximately two weeks
PR: GERM 1001 and consent of the Head of the Department
3900 Survey of German Literature I is a study of the chief periods of German literature based on works of representative authors. A general survey from the earliest works to 1750.
PR: GERM 2011 or the consent of the Head of Department
3901 Survey of German Literature II is a study of the chief periods of German literature based on works of representative authors. A general survey from 1750 to the present.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: GERM 2011 or the consent of the Head of Department
3911 Faust and the Magus Tradition is a study of the legend of Faust's pact with the devil from the Middle Ages to the present in art, music and literature, and its influence on various cultures in both Europe and America. Lectures and readings in English.

3912 Modern German Literature in Translation I (Pre-1945) is a study of the works of some major modern German authors. Lectures and readings in English.

3913 Modern German Literature in Translation II (Post-1945) is a study of the works of some major modern German authors. Lectures and readings in English.

3914 German Women Writers in English Translation studies representative works by prominent German, Austrian, and Swiss women writers from the 19th-century to the present day, their place in German literary history, and the impact of their individual voices.
PR: the former Women's Studies 2000 or permission of the Department Head

3915 National Socialist Ideology and Culture examines German culture within the context of National Socialist era. Special attention will be focused on how language, art and literature were used in National Socialist propaganda.

4000 German Literature of the Eighteenth Century I is a study of the historical and cultural background of the eighteenth century, of Storm and Stress and Classicism. Reading and discussion of representative works with emphasis on Goethe and Schiller. Taught in German.
PR: GERM 3011 and consent of the Head of the Department
4001 German Literature of the Eighteenth Century II is a study of the historical and cultural background of the eighteenth century, of Storm and Stress and Classicism. Reading and discussion of representative works with emphasis on Goethe and Schiller. Taught in German.
PR: GERM 3011 or the consent of the Head of Department
4010 Advanced Stylistics I is specialized study of the more complex areas of German grammar, style, and idiomatic usage, involving intensive practice in composition and oral expression, and focused on detailed work with contemporary cultural materials such as newspapers, television, and film. This course is taught in German. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 3011 or the consent of the Head of Department
4011 Advanced Stylistics II is a continuation of Advanced Stylistics I. This course is taught in German. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: GERM 4010 or consent of the Head of the Department.
4100 German Literature of the 19th Century I is a study of the leading exponents of nineteenth-century literature, including the background of Romanticism and the young Germany movement. Taught in German.
PR: GERM 3011 or the consent of the Head of Department
4101 German Literature of the 19th Century II is a study of the leading exponents of nineteenth-century literature, including the background of Poetic Realism and Naturalism. Taught in German.
PR: GERM 3011 or the consent of the Head of Department
4200 German Literature of the Twentieth Century I traces the important literary movements up to 1945, using a number of representative authors. Reading of selected dramas, novels, poems and short stories. This course is taught in German.
PR: GERM 3011 or the consent of the Head of Department
4201 German Literature of the Twentieth Century II traces the important post 1945 literary movements, using a number of representative authors. Reading of selected dramas, novels, poems and short stories. This course is taught in German.
PR: GERM 3011 or the consent of the Head of Department
4300 Middle High German Language and Literature I (same as Medieval Studies 4300) is an introduction to the German language, literature and culture of the eleventh to fifteenth centuries: historical linguistics, Middle High German grammar and the court epic.
CR: Medieval Studies 4300
PR: one of GERM 2011, 2511, 3011 or the consent of the Head of Department

4301 Middle High German Language and Literature II - inactive course.
4400 Early Modern German Literature I is reading, interpretation and critical analysis of representative works of German literature written in the Age of Reformation and the early Baroque period.
PR: one of GERM 2011, 2511, 3011 or the consent of the Head of Department
4401 Early Modern German Literature II - inactive course.

4802-4825 Special Topics in German Studies II will have topics to be studied announced by the Department.

4998 Comprehensive Examination for Honours Students is the comprehensive examination required for honours students.

4999 Honours Essay for Honours Students is required as part of the Honours program.
PR: admission to the Honours program

### 15.13 Greek

For Greek course descriptions see under Classics.

### 15.14 Greek and Roman Studies

For Greek and Roman Studies course descriptions see under Classics.

### 15.15 Hebrew, Mandarin Chinese, Sanskrit

For Hebrew, Mandarin Chinese, or Sanskrit course descriptions see under Religious Studies

### 15.16 History

A tentative list of upcoming History course offerings can be found at www.mun.ca/hss/courses.php.
History courses are designated by HIST.
1005 Critical Reading and Writing in Indigenous - Aboriginal Studies (same as Archaeology 1005) features the analysis of scholarly literature, media, and other sources of knowledge related to Aboriginal and Indigenous studies. Students practice analytical reading ând writing through class discussion and assignments related to the study of both past and present. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: Archaeology 1005, the former HIST 1016
1007 Critical Reading and Writing: Themes in the History of Business uses case studies to examine the long history of global trade, markets, the emergence of the corporation and the policy and political contexts in which modern business developed. It teaches students how to analyse and think critically about a wide variety of sources and to write well-crafted papers that are coherently organised and argued. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/ hss/crw.
1009 Critical Reading and Writing: The Medieval and Ancient World introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on the medieval and/or the ancient world. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/ hss/crw.

1010 Critical Reading and Writing: The Americas introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on the Americas. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.

1011 Critical Reading and Writing: Modern Europe introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on modern Europe. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
1012 Critical Reading and Writing: The Twentieth Century introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on the twentieth century. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.

1013 Critical Reading and Writing: Canada introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).
through class discussion and assignments on Canada. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.

1014 Critical Reading and Writing: The United States introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on the United States. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.

1015 Critical Reading and Writing: Social and Cultural History introduces students to reading and writing skills required for success in university, including the analysis of scholarly literature and primary sources. Significant class time is spent on instruction in these skills. Students practice analytical reading and writing through class discussion and assignments on themes in social and cultural history. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.

1300 Critical Reading and Writing About Borders and Peripheries inactive course.
1301 Critical Reading and Writing About Historical Encounters inactive course.

2000 Quantitative Reasoning: Visualising the Past introduces students to the ways we understand the complexities of the past and explain it to others. Students in this history course undertake quantitative analysis of standard nominal series used in social history. They learn how to link these diverse sources in order to construct a composite whole and how to effectively present this to a general public using graphic and pictorial evidence. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.

2001 History of Science and Technology introduces students to some of the debates regarding the creation and dissemination of knowledge, the relationship between science and technology, and the implications of new technologies on the societies in which they were and are currently being introduced from classical Greece and Rome to the present. We also examine the ethical dilemmas that some innovations have caused and the reasons for them.

2020 Ancient Near Eastern History (same as Classics 2025) is an introduction to the history of ancient city-states, kingdoms and empires in Egypt and/or Mesopotamia, including economic, social, political and cultural developments.
CR: Classics 2025
2031 Ancient Asian History is a study of the history of ancient India and/or China and/or Japan with emphasis on the way of life of the people, their customs, traditions, art and heritage.

2034 History of the Hellenistic World (same as Classics 2020) is a survey of the history of the Mediterranean world and the Near East from the death of Alexander the Great in 323 BC until the incorporation of the Kingdom of Egypt in the Roman Empire in 30 BC. Particular attention is given to the influence of the new monarchies on political, social and cultural developments in both Greek and non-Greek communities.
CR: Classics 2020
2035 History of Classical Greece (same as Classics 2035) is a survey of Greek history from the Bronze Age to the death of Alexander the Great, with special reference to the social and political institutions of the fifth century B.C.

CR: Classics 2035
2041 History of the Roman Republic same as Classics 2041) is a survey of Roman history from the early monarchy to the death of Julius Caesar, with special reference to the society and politics of the late Republican period.
CR: Classics 2041, the former Classics 2040, the former HIST 2040
2042 History of the Roman Empire (same as Classics 2042) is a survey of Roman history from the death of Julius Caesar to the rise of Constantine, with special reference to the society and politics of the early Imperial period. CR: Classics 2042, the former Classics 2040, the former HIST 2040

2050 Medieval Middle East provides an introduction to the medieval Middle East (330-1453). Students will examine the Byzantine Empire, the Sasanian Empire, and the various Islamic Empires, as well as the minority groups living under these empires, including the Coptic, Armenian, and Syriac communities.

2060 History of War and Society to 1789 (same as the former HIST 3050) is a survey of major developments in the history of warfare from the earliest times to 1789 with particular emphasis on changes in the nature and conduct of warfare, the evolution of military thinking, the organization of military and naval forces, the impact of technological change, the emergence of professionalism, societies, and armed forces.
CR: the former HIST 3050

2065 History of War and Society from 1789 to the Present (same as the former HIST 3060) is a global examination of warfare, including its effect on society, culture, politics, economics, and military thinking, from the French Revolution to the more recent threat posed by revolutionary and fundamentalist terrorism. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former HIST 3060
2130 Seafaring Places and Seafaring Peoples is a study of the places and people involved in maritime activities between Europe and Asia and in India, south-east Asia, China and Japan during the period of European expansion to the region.

2140 The Atlantic Slave Trade is a comparative survey of the Transatlantic Slave Trade 1503-1851, from West African origins through the oceanic Middle Passage to the formation of slave societies in the Americas. This course examines processes of enslavement, commodification, shipboard resistance, sale and adaptation, and the international movement to abolish the slave trade.

2150 Modern Latin American History introduces students to the history of Latin America (including the Caribbean) from Independence in the early nineteenth century. We examine the post-colonial troubles of the nineteenth century as liberal-minded individuals and movements attempted to establish modern nation-states and economies, as well as the opposition they faced by traditional elements such as the oligarchy and the Catholic Church. Twentieth-century topics range from the Mexican Revolution, Brazilian and Argentine populism, soccer in South America, and Cuban film.

2200 Making Canada is a survey of Canadian History to Confederation, 1867.

2210 Modern Canada is a survey of Canadian history since Confederation. 2300 Early Modern European History, 1500-1789 is an introduction to the main issues and problems in early modern European history with an emphasis on the political, social, economic and cultural developments from the sixteenth to the eighteenth century.
2310 Europe in the Nineteenth Century, 1789-1914 is a survey of the economic, social, political and cultural developments of Europe from 17891914.

2320 Medieval Europe to the Eleventh Century (same as Medieval Studies 2001) is a survey of the economic, social, political and cultural developments of the early Middle Ages.
CR: the former HIST 2030, Medieval Studies 2001
2330 Medieval Europe Since the Eleventh Century (same as Medieval Studies 2002) is a survey of the economic, social, religious, political and cultural developments of Europe in the high and late Middle Ages.
CR: the former HIST 2030, Medieval Studies 2002
2340 European Urban History examines the development of urban networks and the growth of specific towns and cities in early modern and modern Europe. We will also study how these centres were perceived, and the roles of public spaces and public festivals. Much of this course is devoted to examining the conditions found in urban centres and the impact on local inhabitants. The course concludes with a study of nineteenth century urban boosterism.
PR: at least 3 credit hours in History
2350 Europe in the Twentieth Century examines social, economic, and political changes from 1918 to the present including the collapse of monarchies, the emergence of mass politics, fascism and totalitarianism, World War II, postwar reconstruction and the welfare state, European integration, and Europe in the postwar economic and political order. The course will examine Britain, France, Germany, and Italy, and particularly the European Union. Special attention will be paid to the demise of class politics and the impact of postwar affluence.
CR: the former European Studies 2000, the former Political Science 2350, the former Political Science 2990

2500 Global History to 1945 is a study of the world-wide impact of the main events and developments in the age of global interdependence. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former HIST 3700
2510 Global History Since 1945 is an historical analysis of the main issues in the contemporary world since 1945. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former HIST 3710
2600 History of the United States of America to 1865 is a survey of the history of the United States of America from its colonial origins to the end of the Civil War.
CR: the former HIST 3230
2610 History of the United States of America Since 1865 is a survey of the history of the United States of America since the Civil War.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

CR: the former HIST 3240
2665 Sickness and Health in Western Society examines changing understandings of disease causation and how the human body functions, the evolution of formal medical education, and the rise of medical institutions. Examples of fine art, literature, and popular culture will be integrated into lectures and seminars to help provide a comprehensive overview of what it has been like to be ill and well over the last three millennia.

## 2760 Women's History: The Gendered Past - inactive course

2800 Indigenous Peoples and Colonialism is a comparative survey of Indigenous experiences with colonialism in a global context from the sixteenth century onwards. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3000 Medieval Books (same as English 3002, Medieval Studies 3000, Religious Studies 3000) is an examination of the development and role of the manuscript book during the Middle Ages. Topics covered will include book production and dissemination; authors, scribes and audiences; and various kinds of books (e.g. glossed Bibles, anthologies, books of hours, etc.) and their uses.
CR: English 3002, Medieval Studies 3000, Religious Studies 3000
3005 West to East: Aspects of the German Intellectual Influence on Russia - inactive course.

3011-3019 (Excluding 3015) Special Topics in Ancient and Medieval History are specialized studies in Ancient and Medieval history. Topics to be studied will be posted on the Department of History website.
CR: credit may be obtained for only one of HIST 3016 and HIST 3803
3015 Medieval Europe in a Global Perspective investigates the roles of colonization, exploration, and encounters with foreign societies in medieval European history. It aims at understanding the impetus and motives that led to situations in which medieval Europeans migrated, traveled, and encountered distant and little known civilizations, as well as their reactions to these encounters.
3020 Art, Architecture and Medieval Life - inactive course.
3030 Environmental History examines human relationships to the natural environment. The focus of the course is the global history of environmental changes caused by humans, and the influence of the natural environment on human cultures and societies. Case studies will focus on issues with broad relevance to contemporary environmental issues such as energy use, the environmental impact of military conflict, species introductions, natural disasters, urban sustainability, ecological restoration, and the origins of environmentalism. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3110 History of Newfoundland to 1815 studies the growth of settlement and the manner in which a 'migratory' fishery carried on from England and Ireland changed into a 'sedentary' fishery carried on by residents of Newfoundland.
3120 Modern Newfoundland Since 1815 examines the establishment and development of political institutions, changes in economic structure and the growth of populations

3200 Women and the Law in Newfoundland History - inactive course.
3270 Christianity and the Roman Empire (same as Classics 3270, Medieval Studies 4300, Religious Studies 3270) is a study of the relationship between Christianity and the Roman Empire from the first to the fourth
century.
CR: Classics 3270, Medieval Studies 4300, Religious Studies 3270
3360 Revolutionary and Soviet Russia - inactive course.
3370 German History 1, to the Mid-Nineteenth Century examines the history of the peoples and states of the Holy Roman Empire of the German nation and the Germanic Confederation with emphasis on the origins of modern Germany.
3380 German History II, Since the Mid-Nineteenth Century examines the history of German-speaking central Europe with special reference to the evolution of modern Germany since the mid-nineteenth century.
3440 History of the British Empire and Commonwealth Since 1815 examines the transition from British Empire to Commonwealth of Nations.
3450 Tudor and Stuart Britain, 1485-1714: Reformation, Renaissance, and Revolution examines a dynamic period of religious, cultural and political change.
3460 British History Since 1714 examines British history from the accession of the Hanoverians to the welfare state.

3480 History of Ireland, 1603 to the Great Famine is a survey of Irish history from Hugh O'Neill's submission to the English in 1603 to the mid-
nineteenth century disaster of the Great Famine.
3490 History of Ireland Since the Great Famine is a survey of Irish history from the mid-nineteenth century to the present.
CR: the former HIST 3470
3520 Aboriginal History to 1763 (same as Archaeology 3520, Anthropology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.
CR: Anthropology 3520, Archaeology 3520
3525 Aboriginal History From 1763 (same as Archaeology 3525, Anthropology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.
CR: Anthropology 3525, Archaeology 3525
3535 Historical Anthropology (same as the former Anthropology 3584 and Archaeology 3584) will explore selected issues in historical anthropology, with special reference to the Mediterranean and North Atlantic worlds. Students will read specific case studies in order to explore the theoretical issues raised by the attempt to understand historically-documented past cultures. In order to give practical examples of methodology classes will analyse primary source material. Students will be-introduced to the textual analysis of myth and legal records, to the interpretation of images and to the analysis of patterns in material culture. The course will consider specific current interpretive issues, particularly the rise of individualism, the consumer revolution and the cultural construction of gender.
CR: the former Anthropology 3584, Archaeology 3584
UL: not applicable towards the Major or Minor in Anthropology
3536 Object Lessons: Putting Strange Things in Context (same as Archaeology 3536) explores the interpretation of unique objects, especially those which have been separated, in some way, from their historical context or archaeological assemblage. Students will take a multi-disciplinary approach to understanding a specific remarkable artifact. Topics include the history of technology, the emergence of art, the invention of tradition and the role of design in industrial societie
CR: Archaeology 3536
PR: it is recommended but not obligatory, that students should have
successfully completed one of the following courses: ARCH 1000 or
the former 1030, Classics 1100 or 1200, Folklore 1000, HIST 1010 or 1011

## 3560 A History of Human Rights - inactive course.

3570 The Modern Middle East is an examination of the peoples and states of the Middle East and their interaction with each other and with the great powers since the mid-nineteenth century.

3582 Historical Archaeology (same as Archaeology 3582, the former Archaeology 2582, and the former History 2582) will introduce students to historical archaeology, with special reference to the North Atlantic, 1000 to 1900 AD. The archaeology of specific sites will be examined in order to raise issues about theory and method. Students will be introduced to paleography; historic maps; documentary archaeology; the survey, excavation and analysis of complex sites; material culture and subsistence studies; cultural resource management and theoretical approaches including historical anthropology, ethnohistory, world systems and consumer studies.
CR: Archaeology 3582, the former Archaeology 2582, the former History 2582, the former History 3530
PR: Archaeology 1000 or the former 1030
3585 Africa Since 1800 examines the history of Sub-Saharan Africa from the eve of colonialism until the post-independent contemporary era.

3590 The Early Modern Caribbean examines the history of the Caribbean region in the period 1492-1848, addressing topics such as comparative labour systems, slave resistance, colonial societies, plantation landscapes, and environmental change.

3600 Industrial Revolutions of the Eighteenth and Nineteenth Centuries - inactive course.

3640 War and Society in Colonial North America examines the struggle for empire and nationhood from the arrival of Europeans to the withdrawal of British forces from Canada in 1870. The course will take a comparative approach to examining war's effect on social, economic, and political developments in what is now Canada, focusing on specific conflicts and themes such as the struggle for empire, the military as an institution, gender, class, ethnicity, and memory.

3641 War and Society in Modern Canada - inactive course.
3660 The Scientific Revolution - inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3665 Death, Disease and Medical Care in Early Modern and Modern Europe - inactive course.

3675 Navies and Societies Since 1650 is an examination of the rise of modern navies since 1650 that places navies and naval decisions within broader national and international political, economic and social contexts.
CR: the former HIST 3822
3680 North Atlantic Seafaring to 1850 examines the maritime mercantile development of the countries on the Atlantic littoral, 1650-1850.

3690 North Atlantic Seafaring Since 1850 - inactive course.
3710-3729 (Excluding 3713, 3728) Special Topics in British History: Harlow are available only as part of the Harlow Campus semester

3740-3750 (Excluding 3747, 3748) Studies in Modern Social and Intellectual History are selected studies in the history of modern ideas and society. Aspects to be studies will be posted on the Department of History website.

3765 Gendered Indigenous History is a thematic examination of the complexities of gender and indigeneity from a global perspective, with particular emphasis on the gendered experiences of colonialism. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3780 Women in Medieval Europe, 500-1500 uses a wide variety of primary and secondary sources to examine medieval women in their social, political, cultural, and religious contexts to understand women's lives in this important millennium of the European past.

3785 The European Family: The Age of Faith to the Welfare State focuses on the family in Europe from the middle ages to the early twentieth century. Topics examined will include: family structure, kinship, demography, sexuality, gender relations, child-rearing, attitudes towards the elderly and care of them, and the place of the family in the larger community.
CO: at least 3 credit hours in history at the 2nd-year level, or permission of the instructors
PR: at least 3 credit hours in history at the 2nd-year level, or permission of the instructors
3790 Reel American History: United States History through its Films, 1895-1945 interprets narrative films as historical evidence to shed light on shifts in American culture and society during the first half of the twentieth century.
3795 Reel American History: United States History through its Films, Since WWII interprets narrative films as historical evidence to shed light on shifts in American culture and society during the second half of the twentieth century.
3800-3830 (Excluding 3801, 3806, 3807, 3811, 3813, 3819, 3821, 3822, 3826) Contemporary Problems in Historical Perspective is an analysis of developments leading to a contemporary issue or problem selected each year or semester. Aspects to be studied will be posted on the Department of History website.
CR: credit may be obtained for only one of HIST 3016 and HIST 3803
3801 History of Modern Revolutions examines theoretical and thematic approaches to the study of revolution. The class will study some of the major political revolutions of the twentieth century and also explore the causes and consequences of various social, cultural, and economic upheavals such as the student revolts of the 1960s and the sexual revolution. There will be a discussion on how the way in which historians have studied revolutions has changed during the past half century.
3806 Titanic Histories investigates the 'unsinkable ship', its passengers, crew and owners, and the dilemmas its loss has created for over a century. Students will examine how present-day understandings of the past are expressed in the multiple ways and diverse forms of treating the Titanic.

3807 World War I in Historical Perspective examines one of the most important events in twentieth-century world history, the First World War, and the war's global impact on economics, society, culture, politics, and warfare. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3811 The Menace of Progress: Colonialism and the Making of the Modern World encourages students to think critically about ideas of progress, enlightenment, and civilization by examining the emergence of the modern world and its relationship to colonialism. It explores the rise of the West by examining global history since the fifteenth century. Course topics include the transatlantic slave trade, enclosure, the destruction of Indian cotton manufacturing, and consumer culture. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3813 Gendered History: Women in Newfoundland and Labrador examines the experiences of women in Newfoundland and Labrador with an emphasis on the nineteenth and twentieth centuries. It explores the interaction of women's lives and the province's social, political and economic
history. Topics to be covered include work (paid and unpaid); childbearing and child rearing; immigration and emigration; political activity; and legal status.

3819 A History of Central Europe: the Czech Republic, Slovakia, Poland, and Hungary follows the development of the Czech and Slovak Republics, Hungary, and Poland out of the Austro-Hungarian, German and Russian empires after World War I. Subjects will include internal matters and international relations from the early twentieth century into the post-World War II period. Special emphasis will be given to the events leading up to the crises created by the end of the Soviet Union and the emergence of new Russia.

3821 Gender in Canadian History examines the experiences of women and men and the construction of gender identities through themes such as sexuality, moral reform, immigration, racial/ethnic identity, indigeneity, and participation in the workforce.

3823 History of Terrorism is the study of the historical origins of modern terrorism both within nations and transnationally. The course will emphasize the significance of terrorism, the interconnections between terrorist organizations, the activities of numerous terror groups, with examples drawn from a variety of countries. A range of historical viewpoints will be presented to understand the many controversial issues which surround this topic.

3826 The Roma of Central and Eastern Europe is an examination of the history of the Roma of Central and Eastern Europe, from the Middle Ages to the present. This course looks at the Roma as a separate ethnic minority and as an integral part of these societies. Discussion includes the contributions which the Roma have made to the history, culture, and literature of these regions, as well as the prejudice and mistreatment which is part of their history.
3827 History of Espionage examines the historical significance of espionage from ancient to recent times, emphasizing pivotal events in global history such as the Cuban Missile Crisis, the historical resort to disinformation, violent and nonviolent methods used to acquire intelligence, and the creation of bureaucratic intelligence structures like the CIA. The careers of particular spies, particularly double agents, will also be studied.

3840 Historical Methods is an introduction to the methods and practices of history in the modern era. This course is compulsory for Majors and Honours students, including those intending to apply for graduate studies.
CR: the former HIST 4801
PR: 12 credit hours in History

## 3860 Vernacular Architecture - inactive course.

3870 An Introduction to the History of Western Architecture Since the Renaissance (same as Folklore 3870) introduces students to the history of architecture in the western world, beginning with the revival of classical forms in Renaissance Italy.
CR: Folklore 3870
3925 The Pre-Islamic Empires of Iran introduces students to the history of Iran from the rise of the Achaemenid Empire, through the Parthian and Sasanian Empires, to the advent of the Islamic era. Through the use of primary source material, students will be introduced to the types of historical sources available for Iran, the problems associated with this evidence, and the different ways that we construct ancient history.

3930 Byzantine History to 1453 will introduce students to the history of Byzantine society from its beginnings under Constantine to the fall of Constantinople to the Turks in 1453. In addition to the chronological history, students will also encounter several characteristics of Byzantine society, including religion, urbanization, and interaction with the Persian Empire.

3935 Islamic History to 1453 will introduce students to the history of Islamic society from its beginnings under Muhammad to the rise of the Ottomans and the fall of Constantinople in the fifteenth century. We will also discuss the non-Muslim communities which co-existed with the Muslim umma or community. Through the use of primary source material, students will be introduced to the types of historical sources available for Islamic history, as well as the problems associated with this evidence.
PR: there is no prerequisite for this course although History 2050 is strongly recommended

3940 Urban Life in Medieval Europe will explore the origins of medieval urbanization, the development of its specific features, and the way of life of medieval town-dwellers. Although the medieval town was very different from the modern city, it had a tremendous impact on the development of European society. This can be seen in a range of phenomena ranging from participative government, secular literacy, and solutions to environmental challenges.
4000-4008 (Excluding 4002, 4003) Special Topics in Ancient and Medieval History are specialized studies in Ancient and Medieval history. Aspects to be studied will be posted on the Department of History website.

4002 The Uses of Writing in Medieval Europe explores the pragmatic uses of writing in medieval Europe through the study of non-literary texts.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

The focus will be on the variety of situations in which individuals of diverse social backgrounds - men and women, laypeople and clerics, aristocrats and townsfolk - came into contact with writing. Sources under study will include inscriptions, letters, and maps, with a special focus on charters and other documents.
4003 Religion and Society in the Late Antique and Early Medieval Periods examines a range of written and physical evidence for the interaction of religion and society in the late antique and early medieval world. This course will cover the broad topic of religion and society through an in-depth analysis of the historiography and material culture of the late antique and early medieval period.

4009 Death and the Afterlife in the Middle Ages examines medieval ideas of what happens at and after death, starting from the premise that such ideas have great influence upon how people live their daily lives. It will look at the theology of death, ideas of heaven, hell, and purgatory, as well as conceptions of death and the afterlife in the popular culture, architecture, literature, etc., of European Christendom.

4010 Cultural Interaction in the Medieval Middle East examines the origins of Muslim-Christian relations in the Middle East through an examination of the effect of the arrival of Islam on the communities of Iraq, Iran, and the Levant, as well as the Byzantine reaction to Islam.

4011 Nature and Culture in Medieval Europe will introduce students to the expanding field of the environmental history of medieval Europe. Participants will study how medieval Europeans conceived of the interrelationship between natural environment and human communities, as well as how the impact of human activities on the environment can be reconstructed.

## 4100 History and Memory - inactive course.

4110-4130 (Excluding 4125) Special Topics in North Atlantic History are specialized studies in the history of the North Atlantic. Aspects to be studied will be posted on the Department of History website.

4125 The History of Environmental Ideas in Canada and the United States surveys major philosophical, scientific, and popular ideas of nature in Canada and the United States during the nineteenth and twentieth centuries. Students will examine key historical manifestations of environmental thought such as romanticism, the wilderness idea, ecofeminism, deep ecology, and social ecology. Students will also be exposed to important voices from social groups who are often marginalized in environmental debates such as African-Americans, Aboriginal people, and the working class.

4200 Topics in United States Film and History explores selected themes in the relationship between the American cinema and American national culture. Topics will vary from year to year, but may include the study of a particular period in U.S. film and history; an examination of how filmic representations of race, class, gender, and/or sexuality have changed over time in connection to broader historical shifts; or, the historical analysis of a particular genre as a way to understand shifting cultural and social values within the United States.
PR: any 2000, 3000, or 4000 level course in U.S. History or Film Studies
4210-4229 (Excluding 4212, 4213, 4214, 4216, 4219, 4220 and 4222) Special Topics in North American History are specialized studies in the history of North America. Aspects to be studied will be posted on the Department of History website.

4212 The North American Frontier examines aspects of the history of the frontier in North America. The course will focus on major themes and debates in frontier history, including, but not limited to, the history of colonialism, settlement, and Aboriginal-settler relations.

4213 Topics in U.S.-Canadian Relations explores selected themes in U.S. - Canadian relations. Beyond considering the more formal' ties between Canada and the United States from a historical perspective, such as military and diplomatic interactions, this seminar examines social and cultural interrelationships.

4216 Topics in U.S. Cultural History explores selected themes in U.S. cultural history. Topics will vary from year to year, but may include historical approaches to such popular art forms as vaudeville, amusements parks, film, popular music, comics, television, gaming, and spectator sports.
4219 Slavery and Resistance in the Atlantic World examines the evolution of slavery and other forms of coerced labour in the early modern period.
4220 Aboriginal Peoples and the Environment examines the stereotypes, generalizations, and actual ways in which Aboriginal peoples interacted with the environment from the pre-European contact period to the present in North America. Course topics include: conservation, preservation and overhunting of mega-fauna, bison, beaver, and other animals; ecological manipulation, despoliation, and restoration; traditional and scientific ecological knowledge; and the creation and legacy of the "Ecological Indian" ideal in literature, film, tourism and political activism.

4222 North American Aboriginal Peoples in Historical Perspective inactive course.
4230 Topics in Newfoundland and Labrador History I are specialized studies in the history of Newfoundland and Labrador to the mid-nineteenth century.
4231 Topics in Newfoundland and Labrador History II are specialized studies in the history of Newfoundland and Labrador since the midnineteenth century.

4240-4260 (Excluding 4252, 4253, 4255) Special Topics in Canadian History are specialized studies in Canadian history. Aspects to be studied will be posted on the Department of History website.
4252 Canada and the North examines the ideas and historical processes that have contributed to the colonization of land and people in the Canadian North. With a primary focus on the territorial north, the course will also analyze the many ways that Dene and Inuit have resisted and adapted to colonial processes. Using film, radio documentaries, and primary documents, this course will consider themes such as pre-contact life, northern militarization, Inuit relocations, development conflicts, and environmental injustices.
4253 Inequality in Canada since 1945 challenges the conventional wisdom that equality improved in post-war Canada, but declined from the 1970s onwards. It contrasts socio-economic experiences with those of gender, race, nation and sexual orientation. By so doing it raises complex questions about the historical dynamics of identity politics in the making of contemporary Canada.
PR: HIST 2210 or permission of the instructo
4255 The Industrial Revolution in Canada examines the historiographical debates on industrialisation in 19th century British North America by critically evaluating representative works by leading historians of English Canada and Quebec. It also introduces the problems and advantages of the historical sources most commonly used to understand industrialisation.
PR: HIST 2200 or HIST 2210 or permission of the instructor
4310-4330 (Excluding 4313, 4320, 4330) Special Topics in European History are specialized studies in the history of Europe. Aspects to be studied will be posted on the Department of History website.

4313 From Rune Stones to Roxette: the History of the Nordic Countries examines the history of the Nordic countries from the time of the Vikings to the late 20th century but focuses primarily on the early modern period onwards. Students will examine not only the various forces that influenced events and trends in the Nordic countries, but also the impact that this 'peripheral' area of Europe had on other parts of the world while also maintaining its own identity.
4320 The French Revolution examines the causes and proximate and long-term consequences of the events of 1789 and the revolutionary period in France. The emphasis is on how the French people initiated and responded to major events but we also explore the consequences of the Revolution on French colonies and the rest of Europe. This course also provides students with the opportunity to assess how historians have explained and interpreted the events from approximately 1789-1815.
4330 Aspects of Modern British History: Victorian England designates an industrial, urban, ostensibly democratic, country in the period when Britain was dominant in the world. 'Victoria' and 'England' are the starting points, however, for a critical examination of those characteristics in this seminar course.
PR: a minimum of two second year History courses, or the permission of the instructor. Students who have not previously studied history beyond first year should consult with the Instructor before registering for this course.
4360-4380 Special Topics in European History: Harlow are available only as part of the Harlow Campus semester.

4410-4430 (Excluding 4411, 4417, 4419, 4421, 4429) Historical Problems are specialized studies in historical problems. Aspects to be studied will be posted on the Department of History website.
4411 War and Society in Canada examines various themes and topics in the military history of Canada, emphasizing the relationship between war and society.

4416 Historical International Human Rights focuses on historical studies of the implementation and violation of human rights globally. Students examine the history of human rights particularly since the Second World War, read major international human rights Conventions and explore reasons why violations of rights have occurred in some societies. The actions of the United Nations in human rights will also be analyzed. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

4417 Assassinations In History focuses on the significance of several different assassinations within a global context. Each student will select a
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
specific assassination (such as that of Martin Luther King or Mohandas Gandhi) to research and will assess the consequences of the assassination on government and society. This research will emphasize the events of these varied assassinations, the motivation of each assassin and whether or not there was a conspiracy. These assassinations will be compared and contrasted in class.
4419 Marx and Marxism uses a global perspective to examine Marxist thought as a product of revolutionary struggles. Emphasis will be on the nature of the historical circumstances and the concrete problems people faced. Each week there will be a critical examination of selected works produced by and through these struggles. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

4421 Imperialism examines the global, political, economic and cultural processes of modern imperialism and its historical antecedents. Topics considered include empire building, colonial theory, and anti-imperial resistance. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

4429 Remembering War introduces students to the concepts of private and collective memory by focussing on the relationship between memory, violence, and armed conflict. This course will explore a number themes including but not limited to ideas about citizenship, community, cross-cultural encounters, architecture, heroes and heroines, governance, modernity, masculinity, femininity, trauma, and politics.
4480 Oral History (same as Folklore 4480) examines the narratives of everyday people who tell their life experiences. This course focuses on the collection and analysis of oral narratives and how they can be used to illuminate the past. It considers the power of these narratives to shape constructions of the present and future for both narrators and audiences.
CR: Folklore 4480
4500 Engaging the Environmental Humanities (same as Geography 4500) explores the role of the environmental humanities in a setting beyond the traditionally defined class-room. While the initial weeks focus on providing students with the tool-kit and theoretical framework for engaging the environmental humanities, the course is mainly driven by projects designed and executed by students in collaboration with community partners.
CR: Geography 4500
PR: enrolment in the Diploma in Environmental Humanities or permission of instructor

4520-4529 Special Topics in Economic and Mercantile History are specialized studies in Economic and Mercantile history. Aspects to be, studied will be posted on the Department of History website.

4560-4570 (Excluding 4568, 4569, 4570) Special Topics in Social and Intellectual History are specialized studies in Social and Intellectual history. Aspects to be studied will be posted on the Department of History website.
4568 Holocaust in Historical Perspective examines the origins of the Holocaust: the state-sponsored, systematic persecution and murder of approximately 6 million European Jews by Nazi Germany and its collaborators between 1933 and 1945. The Nazis persecuted millions more because of their religion, nationality, political views, mental or physical impairment, or sexual orientation. The course explains the historical, social, religious, political and economic factors that cumulatively resulted in the Holocaust.
4570 History of Medicine Seminar explores the content, methodology, and historiography of the history of medicine. Course readings reflect the broad sweep across time and geography of this field, but emphasize trends in Europe and North America during the last four centuries. Students will examine the evolution of intellectual problems that have occupied historians of medicine; explore the complexities specific to researching and writing medical history; and critique and identify differing historical genres, evidence, primary source materials, and methods.

4670-4690 (Excluding 4672) Special Topics in Maritime History are specialized studies in Maritime history. Aspects to be studied will be posted on the Department of History website.

4672 Seafaring Lives: Sea-going Auto/Biography Since 1700 explores how life stories studied as primary sources lead to a reassessment of historian's traditional assumptions and concerns in this course. Students will research and discuss the changing, and often ambivalent, relationship of people and the sea across three centuries of auto/biographical writing and story-telling.
PR: students who have not previously studied history beyond first year should consult with the Instructor before registering for this course
4695 The Middle Ages on Film - inactive course.
4800 Historiography is an introduction to the major historians and historiographical traditions of the West. This course is for Honours students and other selected students, including those intending to apply for graduate studies.

PR: permission of the Head of Department
UL: may not be used to meet the requirements of a Major in History without the prior written approval of the Head of the Department of History

## 4810 Documents Management - inactive course.

4821 Reading Course is a directed reading course for Honours and selected students including those intending to apply for graduate studies. Readings will be taken from a list of works by historians, or social theorists whose works are related to history.
PR: permission of the Head of Department
UL: may not be used to meet the requirements of a Major in History without the prior written approval of the Head of the Department of History

4822 Reading Course is a directed reading course for Honours and selected students. The readings will be chosen in such a way as to supplement a student's knowledge of the student's area of specialization and, where appropriate, to prepare the student for the honours essay. If a student intends to complete HIST 4999, a proposal for the honours essay will be a requirement of the course.
CR: the former HIST 4820
PR: permission of the Head of Department
UL: may not be used to meet the requirements of a Major in History without the prior written approval of the Head of the Department of History
4830-4850 Reading Courses are directed reading courses for selected Bachelor of Arts students.
PR: permission of the Head of Department or delegate
4999 Honours Essay is required as part of the Honours program.
PR: HIST 4822, admission to the Honours program
UL: may not be used to meet the requirements of a Major in History without the prior written approval of the Head of the Department of History

### 15.17 International

International courses are designated by INTL.
301L One-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for one week in duration.

## CH: 0

CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

302L Two-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 2 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada
303L Three-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 3 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

304L Four-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 4 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

305L Five-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 5 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

306L Six-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 6 consecutive weeks in duration.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

307L Seven-Week Study Outside Canada is a non-credit hour designation
that signifies completion of a program of university-level study requiring residency outside of Canada for 7 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

308L Eight-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 8 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

309L Nine-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 9 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

310L Ten-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 10 consecutive weeks in duration.
CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada
311L Eleven-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 11 consecutive weeks in duration.
$\mathrm{CH}: 0$
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada
312L Twelve-Week Study Outside Canada is a non-credit hour designation that signifies completion of a program of university-level study requiring residency outside of Canada for 12 consecutive weeks in duration. CH: 0
CO: enrollment in approved courses requiring residency outside of Canada (normally a minimum of 9 credit hours, if feasible)
PR: acceptance into an approved university-level study program located outside of Canada

399W International Internship is a full-time work or voluntary experience for at least 12 weeks duration in a location outside of Canada. Students are expected to learn, develop and practice the high standards of behaviours and performance normally expected in the work environment. Students should have sufficient academic grounding in international concepts to contribute to the international workplace, to acquire intercultural competencies and to develop as global citizens.
CH: 3
CR: any work term course (final character in the course number is "W" LC: 0
PR: enrollment in the International Bachelor of Arts (iBA); minimum thirdyear standing; minimum 6 credit hours in Language Study (LS) courses; and 12 credit hours in designated International Studies (IS) courses with a minimum $70 \%$ average

### 15.18 Inuit and First Nations Languages

For Inuit and First Nations Languages including Innu-aimun and Inuktitut course descriptions see under Linguistics.

### 15.19 Languages

The second digit in each course number designates an actively spoken language that is not taught in any other department, as follows:

## Second Digit

1 Italian

2 Irish Gaelic
3 Japanese
9 Special topics
X Transfer credits in languages not taught at Memorial University of Newfoundland
A tentative list of upcoming Languages course offerings can be found at www.mun.ca/hss/courses.php.
Languages courses are designated by LANG.
1100 Elementary Italian I (same as the former Italian 1000) is for beginners in Italian. Introduction to the fundamentals of Italian grammar, with particular attention to the acquisition of basic skills in oral and written communication. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former Italian 1000
LC: 4
LH: 1
1101 Elementary Italian II (same as the former Italian 1001) is a continuation of Elementary Italian I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former Italian 1001
LC: 4
LH: 1
PR: LANG 1100 or the former Italian 1000
1200 Introduction to Irish Culture and Speaking is an introduction to lrish culture, and to speaking and listening to Irish Gaelic. Students develop familiarity with spoken and aural lrish through practice conversations. Discussion and pronunciation exercises are balanced with exposure to Irish culture, including songs, music, plays, films, television, radio, video and oral storytelling. Links between Ireland, Canada and Newfoundland and Labrador are investigated. Prior familiarity with Ireland or Irish Gaelic is not required.
CR: the former Linguistics 2700, the former Linguistics 2701
UL: not applicable towards the Bachelor of Arts Language Study

1201 Introduction to Irish Writing and Cultural Connections is an introduction to Irish literature and to the Irish Gaelic written word. Students will examine the nature of writing in modern sources such as Irish-language newspapers, magazines and websites, balanced with works by popular Irish authors. Word formation, sentence structure, basic grammar, reading, spelling, and structures are discussed. The course also explores Irish connections with Newfoundland and Labrador, such as places, personal names and cultural practices.
CR: the former Linguistics 2700, the former Linguistics 2701
UL: not applicable towards the Bachelor of Arts Language Study Requirement
1300 Introduction to Japanese I (same as the former Linguistics 2702) is an introduction to the Japanese language. It aims to develop communication skills based on the fundamentals of Japanese grammar, vocabulary, and conversation. Students will acquire speaking and listening proficiency, reading skills to understand short, simple written materials, and writing skills to write short paragraphs in Hiragana and Katakana writing scripts. Students also explore Japanese culture and traditions. No prior knowledge of Japanese is assumed. This course follows the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former Linguistics 2702
1301 Introduction to Japanese II (same as the former Linguistics 2703) is a continuation of Japanese I. Students will acquire speaking and listening proficiency, reading skills, writing skills to be able to write short paragraphs and about 43 Kanji. Students will continue to explore Japanese culture and traditions. This course follows the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former Linguistics 2703
PR: LANG 1300

### 15.20 Law and Society

For Law and Society course descriptions see under Political Science, Law and Society.

### 15.21 Latin

For Latin course descriptions see under Classics.

### 15.22 Linguistics

A tentative list of upcoming Linguistics course offerings can be found at www.mun.ca/hss/courses.php.
Linguistics courses are designated by LING.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

1100 Introduction to Linguistics is a general introduction to linguistic concepts which are important for understanding the nature of language and its function for communication. Topics include: languages as structured systems; the systematicity of language change; the classification of languages into families and their geographical distribution; language, the brain, and language disorders; the acquisition of language; and human vs animal communication.
CR: LING 1155, the former LING 2100
1103 Introduction to Linguistic Analysis: Syntax (same as the former LING 2103) is an introduction to the study of grammatical patterns in the structure of phrases and sentences. This course provides students with the tools to analyze phrase structure and syntactic constituency in English and other languages. Theoretical topics covered include case theory and agreement, principles of thematic role assignment, and different types of syntactic movement.
CR: the former LING 2103
1104 Introduction to Linguistic Analysis: Phonology (same as the former LING 2104) is an introduction to the study of sound patterns in human languages. Basic empirical and theoretical issues in phonology are demonstrated through the analysis of data selected from English and other languages. Theoretical concepts surveyed include phonological features and contrasts, and syllable structure. These are examined through the study of allophony, allomorphy, and processes such as assimilation and neutralization.
CR: the former LING 2104
1105 The Wonder of Words (same as the former LING 2105) is an introduction to the structure of words. This course presents methods of linguistic analysis through an in-depth study of English word origins. The French, Latin and Greek origins of technical and scientific words are studied, together with the ways that these words may change in structure, sound, and meaning. The course will also provide an introduction to etymology, to writing systems and transliteration, and to the use of dictionaries.
CR: the former LING 2105; credit may not be obtained for both the former LING 2105 and the former LING 1101

1155 Linguistics for Language Learners and Teachers introduces and explains the concepts and terminology useful for formal language instruction. The primary focus is on understanding the structure of various levels of language (meaning, pronunciation, words, sentences, conversations, society and culture, and change), specifically as these structures relate to second language learning. The secondary focus is on research on learning and teaching and the natural acquisition of language. CR: LING 1100

1530 Reading and Writing in Innu-aimun I - inactive course.
1531 Reading and Writing in Innu-aimun II - inactive course.
2020 Introduction to the Structure of Inuttitut I - inactive course.
2021 Introduction to the Structure of Inuttitut II - inactive course.
2022 Issues in Oral Inuttitut reviews the primary role of oral language in communication, language, acquisition and language maintenance in oral Inuttitut. The nature and significance of dialect differences are also discussed. Different types of oral language are examined, e.g. stories, newscasts, conversation. Students study how oral language is used within modern Labrador society and whether language attitudes are reflected in this use. Students also consider how best to teach oral Inuttitut and different ways to test for oral proficiency. This course is not normally offered at the St. John's Campus.
PR: LING 2020
2023 Reading and Writing in Inuttitut - inactive course.
2025 Introduction to Inuttitut I introduces students to Inuttitut (Eskimo). Students develop a working knowledge of basic vocabulary and grammar, as well as a number of linguistic concepts that enable them to consult a wide range of reference books. A strong emphasis is placed on oral skills. This course is intended for students who want to learn an Aboriginal language spoken in Newfoundland and Labrador. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
2026 Introduction to Inuttitut II is a continuation of LING 2025. Students learn further vocabulary and grammar of the language. They are also required to submit a project based on their own investigation of some aspect of the grammar of the language (based on either reference books or fieldwork). A strong emphasis is placed on oral skills. This course is intended for students who want to learn an Aboriginal language spoken in Newfoundland and Labrador. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: LING 2025
2030 Introduction to Innu-aimun (Montagnais/Naskapi) I - inactive course.

2031 Introduction to Innu-aimun (Montagnais/Naskapi) II - inactive course.

2040 Introduction to Mi'kmaq I - inactive course.
2041 Introduction to Mi'kmaq II - inactive course.
PR: LING 2040
2060 Aboriginal Languages of Eastern Canada is an overview of the aboriginal languages of three language families of Eastern Canada: EskimoAleut (Inuttitut) and Algonquian (Innu-aimun, Mi'kmaq, MaliseetPasamaquoddy and Beothuk) and Iroquoian (Mohawk) with respect to both linguistic structure and current vitality. The course also reviews a history of language suppression and revitalization efforts, within the context of the larger issues of minority language attrition and maintenance, is also considered.
2210 Language in Newfoundland and Labrador: An Introduction to Linguistic Variation examines linguistic variation and language change in the languages of Newfoundland and Labrador. Topics covered include the concept of variation within language, both regional and social, the chief causes of such variation, and some of its societal consequences. As a Quantitative Reasoning course, practical workshops and assignments focus on producing a final scientific research report using quantitative analysis, graphical representation of numerical data, and logical reasoning involving numbers. All sections of this course follow Quantitative Reasoning guidelines available at www.mun.ca/hss/qr.
UL: may not be used as both a Quantitative Reasoning course and the former Research/Writing
2212 Language and Gender (same as the former LING 3212) explores gender, sexuality and language and their relationship to culture, power, performance, interaction, social networks, language change, and language in the school and workplace. The course introduces theoretical perspectives, methodologies, and research findings, from an early focus on gender difference to more recent work on how language helps people create and perform gender and sexuality.
CR: the former LING 3212
2220 Linguistics and Law (same as the former LING 3220) is an overview of the many relationships between linguistics and the judicial process. Topics to be covered include: the language of legal texts, and the Plain English movement; language use in legal settings (such as eyewitness testimony, jury instructions, and the language of lawyer-client interactions); the legal disadvantages which language may impose on speakers of minority languages and non-standard dialects; and the emerging discipline of forensic linguistics (which deals with such issues as voice and authorship identification, and linguistic interpretation of evidence).
CR: the former LING 3220
2300 Philosophy of Language and Mind (same as Philosophy 2060, the former Philosophy 2300) is a survey of philosophical thinking about human language and thought, and about how these phenomena relate to the rest of the natural world. Topics covered include the nature of language, the relations between thought and language, and the nature of consciousness.
CR: Philosophy 2060, the former LING 2710, the former Philosophy 2300,

- the former Philosophy 2710

2400 History of the English Language to 1500 - inactive course.
2401 History of the English Language from 1500 to Modern Times inactive course.

2700-2720 Special Topics in Linguistics is an introduction to Uncommonly Taught Languages.
3000 Morphology is an introduction to the study of word structure, which provides a comprehensive overview of morphological phenomena in a wide variety of languages. Topics include inflection, derivation, morphophonology, and operations which change grammatical functions.
PR: LING 1103 or the former LING 2103 and LING 1104 or the former
LING 2104 or waiver in special cases by the Head of the Department
3100 Syntactic Theory builds on the basic concepts from LING 1103 and extends them to include cross-linguistic variation from a variety of language families and language types. New topics examined include the foundations of phrase structure, binding theory, phase theory and parametric variation.
PR: LING 1103 or the former LING 2103 or waiver in special cases by the Head of the Department

3104 Phonetics provides a thorough grounding in pronouncing, transcribing and acoustically analyzing the sounds of the world's languages. Material covered includes study of the vocal anatomy, phonetic transcription of speech data from both English and a variety of the world's languages, as well as basic concepts of acoustic analysis and speech perception. This involves the close examination of data from many of the world's languages, which illustrates how widely languages can differ in their selection and organization of speech sounds.
PR: LING 1100 or LING 1155, or waiver in special cases by the Head of the Department

3105 Issues in the Acquisition of English and the Adult Learner inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3150 Bilingualism: Linguistic, Cognitive and Educational Aspects inactive course.

3155 Introduction to Language Acquisition examines critical issues in language acquisition, in light of the most central theoretical perspectives in this area of research. The course combines experimental evidence from infant speech perception with corpus data documenting speech production abilities in first language learners. Issues in second language acquisition and developmental language disorders are also discussed whenever relevant, and as part of dedicated lectures. Data from different populations of learners and across many different languages serve to illustrate the discussion, whenever relevant.
PR: LING 1100 or LING 1155, or the former LING 2100 or waiver in special cases by the Head of the Department

3201 Phonological Theory presents terms, concepts, and methods of studying phonological representations and phonological processes. Topics include segmental and prosodic aspects of phonological patterning, including stress, tone, and harmony systems. The course also addresses challenges posed by transparent and opaque interactions between different components of phonological systems. These concepts are exemplified using phenomena observed across natural languages. The course also introduces the basics of constraint-based approaches to phonological theory.
PR: LING 1104 or the former LING 2104 or waiver in special cases by the Head of the Department

3210 Introduction to Sociolinguistics introduces the methods and theory underlying current approaches to the relationship between language and society. Topics covered include the concept of variation within language, both regional and social; the linguistic and social causes of such variation; and the means by which societies shape linguistic choices and behaviour.
PR: LING 1100 or LING 1155, or the former LING 2100 or LING 2210 or waiver in special cases by the Head of the Department

3302 History of the French Language (same as French 3302, Medieval Studies 3302) is a study of the origins of French, including the influence of Gaulish, Vulgar Latin, Frankish and the langue d'oc/langue d'oill division, a survey of the dialects, morphology and syntax of Old French and of the evolution from Old to Middle French, including phonology, morphology, syntax and vocabulary.
CR: French 3302, Medieval Studies 3302
PR: 15 credit hours in French and/or Linguistics at the 2000 level or permission of the Head of the Department; Classics 1120 or Medieval Studies 1120 is strongly recommended

3310 Phonology and Morphology of French (same as French 3310) is an examination of the phonological and morphological structure of French. Data from regional and non-standard varieties contrasted with data from standard French: formal rules to deal with observed regularities. Interactions of phonology and morphology in phenomena such as liaison. Derivational and inflectional morphology. Research articles on one or more of the topics dealt with in the course will be assigned as readings, and a written report in French based on one or more of the articles is to be submitted as part of the term work. This course will normally be taught in French.
CR: French 3310
PR: 15 credit hours in French and/or Linguistics at the 2000 level or permission of the instructor

3311 Introduction to General Linguistics: Aspects of French Linguistic Theory - inactive course.
3500 Historical Linguistics focuses on the genetic relationships between languages, using the comparative method, as well as on language change (as documented in phonetics/phonology, morphology, and syntax). Lexical and semantic change are also investigated, as is the role of language/dialect contact. The course covers the basis for comparative and internal language reconstruction, as well as the typological and genetic classification of languages.
PR: LING 1103 or the former LING 2103 and LING 1104 or the former LING 2104 or waiver in special cases by the Head of the Department
3850 Introduction to Semantics examines the foundations of semantics, the study of linguistic meaning. The focus is on sentence-level semantics, involving both lexical meaning and logical/quantificational semantic operations. How do utterances get their meanings? How do we combine simple meanings to create complex ones? How are meanings connected to syntactic structure and intonation? What does context contribute to meaning? Set theory is introduced, as is some formal logic (from propositional logic to a typed lambda-calculus). All sections of this course follow Quantitative Reasoning guidelines available at www.mun.ca/hss/qr.
PR: LING 1103 or the former LING 2103 is required or waiver in special cases by the Head of the Department. LING 3000 and 3100 are recommended.
3950-3960 (Excluding 3951) Special Topics in Linguistics will have topics to be studied announced by the Department.

3951 Language Endangerment and Revitalization provides an introduction to the key issues surrounding the discussion of endangered languages. Causes, consequences, and efforts to reverse the process of
decline (language revitalization or maintenance) are examined through consideration of case studies from around the world. Theoretical models developed to evaluate the current status and future prospects of endangered languages are also considered. The course is likely to include substantial discussion of the situation in Canada and the USA.
PR: LING 1100 or LING 1155, or the former LING 2100 or waiver in special cases by the Head of the Department

4010-4091 will focus on the linguistic structure of certain languages, and are designed to provide senior students with the opportunity to be exposed to a substantial part of the grammar of a language other than those regularly offered in the Faculty of Humanities and Social Sciences. One course in this series will be offered each year, subject to availability of instructor.
PR: LING 1103 or the former LING 2103 and LING 1104 or the former LING 2104 or the permission of the instructor

4050-4054 Linguistic Structure of a North American Aboriginal Language - inactive course.

4055-4059 Linguistic Structure of an Uncommonly Taught Language inactive course.

4100 Morphosyntactic Analysis examines the relationship between complex morphology and syntactic structure. Data and patterns from a wide variety of languages are considered, including several polysynthetic languages. Students use readings selected from the primary literature for class discussion materials and for their own research.
PR: LING 3100 or waiver in special cases by the Head of the Department
4110 Selected Topics in Syntactic Theory is an analysis of a wide range of linguistic data in morphology and syntax. The course focuses on essential linguistic concepts in more than one theoretical framework, and on the nature of linguistic evidence. This course is usually offered in alternate years.
PR: LING 3100 or waiver in special cases by the Head of the Department
4150 Language Acquisition II evaluates different theoretical avenues to explain patterns of first and second language acquisition. The course explores acquisition patterns in first and second language acquisition, bilingual development, and language learning disorders. Building on these data, the discussion covers central theoretical questions about the role of linguistic principles, issues in learnability and effects related to properties of the linguistic input.
PR: LING 3155 or waiver in special cases by the Head of the Department
4151 Advanced Topics in Phonological Development covers current empirical and theoretical questions in phonological development. The course evaluates how different theoretical frameworks can (or not) account for patterns of phonological development observed in a range of different languages. Central to these discussions is the learner's ability to perceive, interpret, and reproduce the various sounds and sound combinations present in these languages.
PR: LING 3155 or waiver in special cases by the Head of the Department
4203 Advanced Phonology (same as the former LING 4201) addresses current issues in phonological theory. Topics include phonology in the lexicon, segmental and prosodic representations, as well as advanced issues in constraint-based approaches to phonology. Students further develop their ability to analyze phonological data in light of current theories.
CR: the former LING 4201
PR: LING 3201 or waiver in special cases by the Head of the Department
4204 Selected Topics in Generative Phonology (same as the former LING 4202) examines a particular topic or set of related topics which are selected by the instructor and which are important in contemporary generative phonology. Readings will normally come from the primary literature. This course is usually offered in alternate years.
CR: the former LING 4202
PR: LING 3201 or waiver in special cases by the Head of the Department
4210 Sociolinguistics II studies the detailed patterns of variation found in any given speech community, and factors which co-vary with them, and the various theoretical models proposed to account for such variability. Students acquire a thorough grounding in the methods and theory underlying current approaches to the relationship between language and society. As their major assignment, students complete a carefully restricted sociolinguistic project. This course is usually offered in alternate years.
PR: LING 3210 or waiver in special cases by the Head of the Department

## 4420 English Dialectology I - inactive course.

4421 English Dialectology II (same as English 4421) is field-work and transcription; modern linguistic geography; structuralist dialectology; occupational dialects; other recent approaches.
CR: English 4421
PR: LING 4420 and 3 credit hours in English at the 2000 level
4500 Introduction to Field Methods focuses on data collection and organization for an unfamiliar language in a simulated field situation, including methods of elicitation, data filing, preliminary analysis, and
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hypothesis formation and testing. In this course, students learn to apply theoretical concepts from all major Linguistics sub-disciplines, including phonetics, phonology, morphology, syntax, and historical linguistics. This course is usually offered in alternate years.
PR: LING 1103 or the former LING 2103 and LING 1104 or the former
LING 2104 or waiver in special cases by the Head of the Department
4700 Experimental Phonetics examines some empirical methods of studying the different stages of the 'speech chain' which links speaker to hearer, with special emphasis on the acoustic and perceptual components of the chain. The course also surveys a range of natural articulations and their acoustic effects, explained through the Source-plus-Filter theory of speech production. The discussion also considers competing theories of speech perception as well as debates on the acoustic versus perceptual bases for phonological features.
PR: LING 3104 or waiver in special cases by the Head of the Department
4750 Selected Topics in Phonology will have topics to be studied announced by the Department. This course introduces students to more advanced topics in core linguistic disciplines.
PR: LING 3201 or waiver in special cases by the Head of the Department
4751 Selected Topics in Morpho-Syntax will have topics to be studied announced by the Department. This course introduces students to more advanced topics in core linguistic disciplines.
PR: LING 3100 or waiver in special cases by the Head of the Department
4752 Selected Topics in Semantics will have topics to be studied announced by the Department. This course introduces students to more advanced topics in core linguistic disciplines.
PR: LING 3850 or waiver in special cases by the Head of the Department
4753 Selected Topics in Acquisition will have topics to be studied announced by the Department. This course introduces students to more advanced topics in core linguistic disciplines.
PR: LING 3155 or waiver in special cases by the Head of the Department
4754 Selected Topics in Linguistic Variation will have topics to be studied announced by the Department. This course introduces students to more advanced topics in core linguistic disciplines.
PR: LING 3210 or waiver in special cases by the Head of the Department
4900-4901 Independent Study are courses that are open to advanced students wishing to do individual research in consultation with an advisor. PR: permission of the instructor

4950-4960 (Excluding 4956) Special Topics in Linguistics will have topics to be studied announced by the Department
PR: permission of the instructor
4956 Language Disorders and Linguistic Theory provides an overview of some of the most frequently studied language-related disorders. This course will focus on the nature of language disorders and how linguistic theory (especially, generative syntax) can account for language behavior in affected individuals. Lectures and assignments will give students the opportunity to examine the clinical aspects of disorders that impact oral language, including specific language impairment, autism spectrum disorder, and aphasia, and to apply syntactic theory to various sets of language data.
PR: LING 3100 and 3155 or permission of instructor
4999 Honours Essay is required as part of the Honours in Linguistics

### 15.23 Medieval Studies

For Medieval Studies course descriptions see under Philosophy, Medieval Studies.

### 15.24 Philosophy

Philosophy courses at the 1000-level are an introduction to the study of Philosophy, its methods, its general questions, and some of the major historical figures in the discipline. Courses at the 2000-level offer an introduction to major fields, applied ethics, and interdisciplinary electives, and can be taken beginning in a student's first year of study. Courses at the 3000-level usually assume that students have completed at least two courses in Philosophy. At the 4000 -level, courses are advanced seminars with small enrollment caps, and normally assume that students have taken at least two Philosophy courses at the 3000-level.
The second digit in each course number at the 2000-level designates an area in Philosophy.

## Second Digit in 2000-level

0 Major Areas in Philosophy
1 Applied Ethics
2 History of Philosophy

## 3 Interdisciplinary Philosophy

The second digit in each course number at the 3000-level designates an historical period.

## Second Digit in 3000-level

0 Ancient Philosophy
1 Medieval Philosophy
2 Modern Philosophy
3 18th and 19th Century Philosophy
4 20th Century and Contemporary Philosophy
A tentative list of upcoming Philosophy course offerings can be found at www.mun.ca/hss/courses.php.
Philosophy courses are designated by PHIL.
1002 Introduction to Philosophy (same as the former PHIL 1200) is a general introduction to the study of Philosophy both as a contemporary intellectual discipline and as a body of knowledge. It introduces philosophy's forms of enquiry, the nature of its concepts, and its fields (epistemology, logic, metaphysics, aesthetics, ethics, and political philosophy) by way of the critical study of primary works by major philosophers Authors may include Plato, Aristotle, Aquinas, Descartes, Hume, Kant, Nietzsche, de Beauvoir, Arendt.
CR: the former PHIL 1200
1005 Philosophy of Human Nature (same as the former PHIL 1000 and the former PHIL 1600) is an approach to philosophical thinking by way of analysis and critique of theories of human nature, classical and modern, and the world views associated with them. This course is of particular value to students interested in the Social Sciences and Humanities.
CR: the former PHIL 1000, the former PHIL 1600
1010 Critical Reading and Writing in Human Nature (same as the former PHIL 1001) provides an overview of foundational knowledge and skills to enable critical reading and writing at the university level by way of analysis and critique of selected conceptions and theories of human nature raised throughout the history of philosophy. All sections of this course follow the Critical Reading and Writing Course Guidelines available at www.mun.ca/ hss/crw.
CR: the former PHIL 1001
1011 Critical Reading and Writing in Ethics (same as the former PHIL 1230) will focus on learning and practicing the fundamental skills required for university-level critical reading and writing that will prepare students for other Humanities and Social Sciences courses regardless of discipline. The course will focus on foundational skills in how to differentiate ethical questions (how ought we to live?) from other types of reasoning. All sections of this course follow the Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: the former PHIL 1230
1100 Critical Thinking aims to impart critical analytic skills: i.e., the ability to recognize good and bad arguments, the ability to explain why a particular argument is good or bad, and a general understanding of why a good argument ought to persuade and a bad argument ought not to persuade.
2010 Metaphysics (same as the former PHIL 2000) is an introduction to the systematic inquiry into the nature of reality. Topic may include the nature of being, time, the question of God, appearance and reality, the one and the many, mind and matter, essence and existence.
CR: the former PHIL 2000
2020 Epistemology (same as the former PHIL 2220) introduces philosophy by way of the question of the nature of knowledge. Is knowledge a possession or an activity? Is truth an illusion, a correspondence, or a form of coherence? What does it mean to 'hold a belief' or 'affirm a proposition'? Short classical texts form the basis of the works studied and may include Plato, Descartes, and Ayer.
CR: the former PHIL 2220
2030 Logic (same as the former PHIL 2210) aims to improve the student's ability to formulate and evaluate arguments. At the end of the course, the student will have a thorough understanding of the essentials of argument, the rules of valid inference, and ways of proving the validity of good arguments and the invalidity of bad arguments. Open in any year to all students desiring acquaintance with basic logical skills. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
CR: the former PHIL 2210
2031 Intermediate Logic (same as the former PHIL 2211, the former PHIL 3110) aims to give students a more thorough understanding of the essentials of argument, and, consequently, the opportunity to become better reasoners. The course builds on and further cultivates the skills and techniques previously developed. Thoroughly completing what is generally known as 'standard logic', the course then surveys important work in elementary meta-theory, modal logic, and other non-classical domains. All sections of this course follow Quantitative Reasoning Course Guidelines
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available at www.mun.ca/hss/qr.
CR: the former PHIL 2211, the former PHIL 3110
PR: PHIL 2030 or the former PHIL 2210 or permission of the Department
2040 Moral Philosophy (same as the former PHIL 2230) aims to identify and justify the principles by which we evaluate our behaviour. It explores such questions as: Is there a universal moral principle governing the conduct of all human beings? Are there specific character traits necessary to being a good person? Can we determine a moral law that would guarantee right action? What is the role of emotion in moral behaviour? The course may also include treatment of specific moral problems.
CR: the former PHIL 2230
2050 Social and Political Philosophy is concerned with the social and political institutions and practices by which human life is organized. Historical and/or contemporary texts will be engaged to explore some of the following issues: What is the nature of political authority? What is the nature of freedom? What material and social conditions must be met in order for societies to be just? How are existing societies unjust, and how should that injustice be addressed?
CR: the former PHIL 3400
2060 Philosophy of Language and Mind (same as Linguistics 2300, the former Linguistics 2710, the former PHIL 2300) is a survey of philosophical thinking about human language and thought, and about how these phenomena relate to the rest of the natural world. Topics covered include the nature of language, the relations between thought and language, and the nature of consciousness.
CR: Linguistics 2300, the former Linguistics 2710, the former PHIL 2300
2070 Philosophy of Religion (same as Religious Studies 2070) examines the philosophical aspects of religious belief, religious language, and theology. Topics may include: the distinction and relation between reason and faith, the existence of God, the meaning of human existence, the problem of evil, and the religious foundations of moral action.
CR: the former PHIL 3500, Religious Studies 2070, the former Religious
Studies 3500
2100 Health Ethics (same as the former PHIL 2551) examines concepts of health and illness and their ethical implications.
CR: the former PHIL 2551
2110 Biomedical Ethics (same as the former PHIL 2553) examines medical dilemmas from legal and ethical points of view.

## CR: the former PHIL 2553

2120 Mental Health Ethics (same as the former PHIL 2552, the former PHIL 2802) is an inquiry into the morality of mental health care and the epistemology of mental illness claims. We will study the mental illness definitions in the Diagnostic and Statistical Manual of Mental Disorders and the International Classification of Diseases, together with critical philosophical essays and nonmedical theories (e.g., Foucault, Mosher).
CR: the former PHIL 2552, the former PHIL 2802
2130 Environmental Ethics (same as the former PHIL 2561, the former PHIL 2809) is a philosophical approach to issues in ecology. Topics may include historical and contemporary concepts of nature, technology, the ethical status of animals and the non-human, the application of traditional ethical paradigms to environmental issues, and the future of humanity in an age of climate change, ballooning human population, disappearing wilderness, and dwindling resources.
CR: the former PHIL 2561, the former PHIL 2809
2140 Media Ethics (same as the former PHIL 2582) examines ethical issues and dilemmas arising in the realm of the mass media, within the context of foundational ethical theories and major philosophies of mass communication. Topics include the nature and structure of mass communication, the public sphere, and the role of the media in a functioning democracy. Subtopics include: propaganda, censorship, freedom of speech, and access to information and communication.
CR: the former PHIL 2582
2201 History of Ancient Philosophy (same as Classics 2701, the former PHIL 2701) introduces students to the origins of philosophy in the West. Topics include cosmology, metaphysics, physics, ethics, God, and the ancient ideal of philosophy as a 'way of life.' We will examine the texts and fragments of the most influential and foundational philosophers of the ancient world, focusing primarily on the thought of Plato and Aristotle, their engagement with the Pre-Socratic philosophers who came before them, and their influence upon philosophers since.
CR: Classics 2701, the former PHIL 2701
2205 History of Medieval Philosophy (same as Medieval Studies 2205, Religious Studies 2205) examines and traces the historical developments of a number of philosophical themes, questions, and ideas throughout medieval philosophy by reading, analyzing, and discussing selected primary texts from philosophers and theologians from the 4th to 14th centuries. Authors may include Augustine, Proclus, Boethius, Al-Farabi, Ibn Sina, Anselm, Ibn Rushd, Maimonides, Aquinas, Bonaventure, Scotus, and Ockham, among others.

## CR: Medieval Studies 2205, Religious Studies 2205

2215 History of Modern Philosophy (same as the former PHIL 2702) is a survey of the development of Western philosophy since the 17th century until the late 18th century. Topics may include the existence of God, whether nature is determined and if there is free will, the rise of early modern science, and the debates over rationalism and empiricism.
CR: the former PHIL 2702
2310 Philosophy and Literature engages philosophically with different literary forms such as poetry, drama, and fiction. Possible topics include the use of literary works to express philosophical ideas, the nature of literary expression, and different traditions of literary criticism and interpretation. Course readings will comprise both literature and philosophy.

## CR: the former PHIL 3610

2320 Philosophy and Psychoanalysis (same as the former PHIL 2541) examines Western theories and practices of soul-care (especially traditions of depth psychology) in a historical perspective, with selections from Augustine, Eckhart, Schelling, Schopenhauer, Freud, Jung, Lacan and Foucault. Students will not only gain knowledge of Western therapeutical cultures, but also an understanding of themselves.
CR: the former PHIL 2541
2330 Philosophy and Technology (same as the former PHIL 2571, the former PHIL 2801) examines concepts of technology and their ethical implications.
CR: the former PHIL 2571, the former PHIL 2801
2340 Philosophy of Film (same as the former PHIL 2581) introduces some of the central philosophers, topics, and themes in the philosophy of film. Topics and themes include: the nature of film image, the relationship between film and "reality", the social/ political role and function of film, and the nature and value of the documentary. The course will also consider the representation of broader philosophical ideas in film. A film or films will accompany each section.

CR: the former PHIL 2581
2360 Philosophy and Art (same as the former PHIL 3620) addresses various philosophical questions concerning art, such as the nature of the work of art, the nature of beauty, the nature of artistic experience, and the social function of art. Course content will include historical and/or contemporary works of art and philosophical texts.
CR: the former PHIL 3620
2370 Philosophy of Law (same as the former PHIL 2400) examines the nature, history, purpose, and operation of law. It covers such topics as natural law, legal positivism, responsibility, justice, individual human rights, the relationship between law and individual freedom, the idea of international law, prominent critiques of law, and the historical development of conceptions of law from the ancient world to the contemporary era.
CR: the former PHIL 2400
3010 Plato (same as the former PHIL 3730) examines Plato's philosophy from selections representing the Socratic, transitional, eidetic, and stoichiological dialogues, as well as Plato's philosophy of the concrete. Plato's thought will be examined as a development of ideas and problems raised in Pre-Socratic philosophy, and the development of his own philosophy will be traced throughout a selection of his writings.
CR: the former PHIL 3730
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3020 Aristotle (same as the former PHIL 3740) examines Aristotle's philosophy of nature, logical works, metaphysics, psychology, and ethics. Attention will also be given to Aristotle's philosophy as a development of and response to Plato's thought. Whether one is a student of Philosophy, History, English, Religion, Classics, Political Science or History of Science, a familiarity with the thought of Aristotle is indispensable. For all these disciplines, not only is his place in history foundational, but his influence often remains formidable today.
CR: the former PHIL 3740
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3110 Medieval and Renaissance Philosophy (same as the former Medieval Studies 3004, Medieval Studies 3110, the former PHIL 3760) examines developments in Philosophy from Augustine to Descartes, looking back on their dependence on Ancient and Hellenistic thought and forward to their influence on Modern philosophy. This course focuses on a particular question or figure during this period. Topics may include: universals and particulars, the existence of God, free will and determinism, the problem of evil, the status of nature, soul and body, and mysticism.
CR: the former Medieval Studies 3004, Medieval Studies 3110, the former PHIL 3760
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3210 Rationalism (same as the former PHIL 3820) holds that reason is the main source of human knowledge, and it has a long history extending from the Pre-Socratics and Plato to the present. This course examines texts and thinkers from the seventeenth and eighteenth centuries, such as Descartes, Spinoza, Leibniz, and others. Topics may include themes and problems
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
such as: the theory of ideas, the question of God's existence and nature, the nature of mind and body, the distinction between primary and secondary qualities, causation, induction, personal identity, and human agency.
CR: the former PHIL 3820
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3220 Empiricism (same as the former PHIL 3830) holds that all human knowledge comes from experience, and it has a long history extending arguably from Aristotle to the present. The "British Empiricists" -- Locke, Berkeley and Hume -- crystallized empiricist concerns in the late seventeenth and eighteenth centuries. This course explores themes and problems in early modern empiricism such as: the theory of ideas, the nature of body, the distinction between primary and secondary qualities, causation, induction, personal identity, and human agency.
CR: the former PHIL 3830
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3230 Kant's Theoretical Philosophy (same as the former PHIL 3850) is an introduction to Kant's theoretical philosophy, concentrating on his theory of knowledge, particularly as stated in the Critique of Pure Reason.
CR: the former PHIL 3850
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3231 Kant's Practical Philosophy (same as the former PHIL 3851) is an introduction to Kant's practical philosophy, concentrating on his ethics, particularly as stated in The Foundations of the Metaphysics of Morals and the Critique of Practical Reason.
CR: the former PHIL 3851
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3310 German Idealism (same as the former PHIL 3860) is a study of postKantian classical German philosophy from 1787-1831. The generation of philosophers immediately following Kant - most notably Fichte, Schelling, and Hegel - took his ideas and developed systematic interpretations of human experience, emphasizing its embodied and social nature, and interpreting history in terms of the struggle between freedom and oppression. This course studies these "German Idealists" who have continued to shape major developments in European philosophy.
CR: the former PHIL 3860
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3320 19th Century Philosophy (same as the former PHIL 3880) treats some of the creative and critical thinkers of the philosophically rich 19th century. The course will explore the philosophical insights offered by movements such as Marxism, psychoanalysis, early existentialism, American pragmatism, and utilitarianism, reading work from figures such as Marx, Freud, Nietzsche, Kierkegaard, James, and Mill.
CR: the former PHIL 3880
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3330 Marx and Marxism (same as the former PHIL 3890) examines the work of Marx and Engels and their followers, focusing on analysis of the nature of modern political economy. It covers such topics as class, capital, capitalism, freedom, the labour theory of value, historical materialism, and communism.
CR: the former PHIL 3890
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3410 Analytic Philosophy (same as the former PHIL 3910) is a loosely connected family of philosophical problems and philosophical methods. Its key precipitant was the development of modern logic, and the myriad ways in which it prompted and abetted certain philosophical projects. Primary readings for the course will stretch from roughly 1880-1950, and may include works by Frege, Russell, and Wittgenstein, among others.
CR: the former PHIL 3910
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3420 Phenomenology (same as the former PHI 3920) is the tradition that aims to "look on" at experience, allowing experience to teach its observer what it is and how it should be understood. This course will address primary figures in the phenomenological tradition, exploring their rich analyses of human existence and their claims about how it should be lived. Authors may include Husserl, Heidegger, Sartre, de Beauvoir, and Merleau-Ponty.
CR: the former PHIL 3920
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3430 Existentialism (same as the former PHIL 3940) is a philosophical tradition dedicated to thinking through the experience of human freedom and to casting doubt on conventional answers to the question of how we should live. Human beings are free to define themselves, according to existentialism, but with that freedom comes a forbidding challenge: the responsibility to define themselves, without any easy answers to the question of how. This course will address some of the central figures associated with existentialism. Authors may include Nietzsche, Kierkegaard, Sartre, de Beauvoir, and Camus.
CR: the former PHIL 3940, the former PHIL 3980
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3440 Pragmatism (same as the former PHIL 3930) is the first and only wholly American philosophical school of thought and remains a leading
school of thought within American philosophy. We will discuss the issues of experience, truth, justification, nature, science, and method with the "classical" pragmatists C.S. Peirce, W. James and J. Dewey and continue to the pragmatists and neo-pragmatists of the mid and late 20th century, which may include Quine, Sellars, Putnam, Rorty, and Brandom.
CR: the former PHIL 3930
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3450 Philosophy of Language (same as the former PHIL 3120) investigates various uses of language and its relationship to thought, as well as particular features of language, such as meaning, synonymy, reference, translation and interpretation.
CR: the former PHIL 3120
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3460 Philosophy of the Natural Sciences (same as the former PHIL 3150) examines major issues in the origins, methods, and philosophical implications of science. Topics may include: science as a form of knowledge; the relations between science and metaphysics to more general theories of knowledge; and the connection between science and values.
CR: the former PHIL 3150
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
4000 Seminar in Metaphysics (same as the former PHIL 4250) focuses on a primary text or texts surrounding a particular metaphysical question. Topics may include: the nature of being, causality, order, unity, essence and existence, and freedom.
CR: the former PHIL 4250
PR: 6 credit hours in Philosophy courses at the 3000 level
4001 Seminar in Epistemology (same as the former PHIL 4260) focuses on a primary text or texts surrounding a particular epistemological question. Topics may include: knowledge vs mere opinion; kinds of justification or warrant; reasons and rationality; theory change, paradigm shift, among others.
CR: the former PHIL 4260
PR: 6 credit hours in Philosophy courses at the 3000 level
4002 Seminar in Logic (same as the former PHIL 4100) focuses on a primary text or texts in logic. Topics may include: inference; proof; computability; consequence; non-classical logics; meta-theory, among others.
CR: the former PHIL 4100
PR: 6 credit hours in Philosophy courses at the 3000 level
4003 Seminar in Ethics (same as the former PHIL 4300) examines ethical questions through the study of primary and secondary texts in the field. The course may focus on metaethics, examining questions such as: what is happiness? what is the ground of one's duty?, or on applied ethics, by looking at specific cases such as euthanasia and genetic engineering, among others.
CR: the former PHIL 4300
PR: 6 credit hours in Philosophy courses at the 3000 level
4004 Seminar in Social and Political Philosophy (same as the former PHIL 4400) examines concepts at the heart of being together, such as power, justice, law, the State and the common good. It will do so by drawing from classical sources in the tradition or from contemporary writers.
CR: the former PHIL 4400
PR: 6 credit hours in Philosophy courses at the 3000 level
4005 Seminar in the Philosophy of Mind (same as the former PHIL 4200) focuses on a primary text or texts surrounding a particular question in the philosophy of mind. Topics may include: dualism vs. materialism; computational models of mind; philosophy of psychology/psychiatry, among others.
CR: the former PHIL 4200
PR: 6 credit hours in Philosophy courses at the 3000 level
4006 Seminar in the Philosophy of Religion (same as the former PHIL 4500) focuses on a primary text or texts surrounding a particular question in the philosophy of religion. Topics may include: the distinction and relation between reason and faith, the existence of God, the meaning of human existence, the problem of evil, and the religious foundations of moral action.

CR: the former PHIL 4500
PR: 6 credit hours in Philosophy courses at the 3000 level
4007 Seminar in the Philosophy of Science (same as the former PHIL 4150) focuses on a primary text or texts surrounding a particular question in the philosophy of science. Topics may include: science vs. non-science; kinds of scientific theory; the scope and range of scientific inquiry; science as a form of knowledge; the relations between science and metaphysics; and the connection between science and values.
CR: the former PHIL 4150
PR: 6 credit hours in Philosophy courses at the 3000 level
4008 Seminar in the Philosophy of Language (same as the former PHIL 4550) focuses on a primary text or texts surrounding a particular question in the philosophy of language. Topics may include: meaning, reference, truth; communication; interpretation; semantics/pragmatics interface, among
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others.
CR: the former PHIL 4550
PR: 6 credit hours in Philosophy courses at the 3000 level
4009 Seminar in the History of Philosophy focuses on a primary text or texts by a particular thinker or group of thinkers and traditions in the history of philosophy. Texts and philosophers will range from the ancient and medieval world to early modernity and the nineteenth and early twentieth century.
PR: 6 credit hours in Philosophy courses at the 3000 level
4010 Seminar in Continental Philosophy examines figures and issues important in 19th-21st-century European philosophy. Dominant schools include post-German Idealism, Marxism, psychoanalysis, phenomenology, structuralism, post-structuralism, and Continental realisms.
PR: 6 credit hours in Philosophy courses at the 3000 level
4100-4199 Special Topics in Major Authors and Texts (same as the former PHIL 4700-4790, the former PHIL 4800-4890) will be announced by the Department.
CR: the former PHIL 4700-4790, the former PHIL 4800-4890
PR: 6 credit hours in Philosophy courses at the 3000 level
4998 Comprehensive Examination is a course that meets regularly throughout the semester to prepare students to write the comprehensive examination at the end of the term. Lectures and review are provided by various Departmental experts throughout the semester. The examination comprises questions on figures, topics, and areas throughout the history of philosophy. To complete the Honours Program in Philosophy, students must successfully complete either the Honours Essay or the Comprehensive Examination. Normally this course is offered in the Winter Term and taken in a student's final semester of study.
PR: enrollment in the Honours program and 6 credit hours in Philosophy courses at the 3000 level

4999 Honours Essay develops independent research and writing skills through regular meetings with a supervisor, the preparation of an approved research proposal, and the completion of the final Honours essay by the end of the semester. Prior to enrolling, ideally a semester in advance, students must contact the Head of the Department to identify a potential supervisor. To complete the Honours Program in Philosophy, students must successfully complete either the Honours Essay or the Comprehensive Examination.
PR: enrollment in the Honours program and permission of the Head of the Department

### 15.24.1 Medieval Studies

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Head of the Department.
A tentative list of upcoming Medieval Studies course offerings can be found at www.mun.ca/hss/courses.php.
Medieval Studies courses are designated by MST.
1000 The Cultural Legacy of the Middle Ages (same as the former MST 2000) will survey the formative cultures of the Middle Ages - Latin, Celtic, Arabic - as well as the rise of the new vernacular cultures, English, Germanic and Romance. Literary trends such as the reliance on authority, the emergence of national epic and the development of court literature will be studied. The course examines the interplay of all the arts - literature, music, art and architecture.
CR: the former MST 2000
1120 Introductory Latin I (same as Classics 1120) familiarizes students with the basics of the Latin language. Students will learn how to read simple narratives and short poems in Latin and examine the connections between language and culture. Evaluation will focus largely on comprehension of written Latin. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 1120, the former Classics 120A
1121 Introductory Latin II (same as Classics 1121) continues to familiarize students with the Latin language and Roman culture and society. Students will acquire a broad vocabulary, learn to read more complex passages of prose and poetry in Latin, and gain insights into key social concepts through study of language. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 1121, the former Classics 120B
PR: Classics 1120 or MST 1120
1130 Introductory Ancient Greek I (same as Classics 1130) familiarizes students with the basics of the Ancient Greek language. Students will master the Ancient Greek alphabet, learn how to read simple narratives in Ancient

Greek, and examine the connections between language and culture. Evaluation will focus largely on comprehension of written Ancient Greek. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 1130
1131 Introductory Ancient Greek II (same as Classics 1131) continues to familiarize students with the Ancient Greek language. Students will acquire a broad vocabulary, learn to read more complex passages of prose and poetry, and gain insights into key social concepts through study of language. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 1131
PR: Classics 1130 or MST 1130
2001 Medieval Europe to the Eleventh Century (same as History 2320) is a survey of the economic, social, political and cultural developments of the early Middle Ages.
CR: History 2320
2002 Medieval Europe Since the Eleventh Century (same as History 2330) is a survey of the economic, social, political and cultural developments of Europe in the high and late Middle Ages.
CR: History 2330
2200 Intermediate Latin (same as Classics 2200) provides a deeper knowledge of the Latin language while offering a window onto the culture and society of Ancient Rome. Students will read selections from works of history, literature, philosophy and oratory in Latin. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ Is.
CR: Classics 2200
PR: Classics 1121 or MST 1121
2205 History of Medieval Philosophy (same as Philosophy 2205, Religious Studies 2205) examines and traces the historical developments of a number of philosophical themes, questions and ideas throughout medieval philosophy by reading, analyzing and discussing selected primary texts from philosophers and theologians from the 4th to 14th centuries. Authors may include Augustine, Proclus, Boethius, Al-Farabi Ibn Sina, Anselm, Ibn Rushd, Maimonides, Aquinas, Bonaventure, Scotus and Ockham, among others.

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\text { CR: Philosophy 2205, Religious Studies } 2205
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2300 Intermediate Greek (same as Classics 2300) provides a deeper knowledge of the Ancient Greek language while offering a window onto the culture and society of Ancient Greece. Students will read selections from works of history, literature, philosophy and oratory in Ancient Greek. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 2300
PR: Classics 1131
2494 Game of Genders: Sex and Society in the Medieval North (same as Archaeology 2494) introduces students to considerations and expressions of gender in northern medieval society, with particular reference to Viking and Anglo-Saxon worlds. The course explores the concept of gender and considers varied gendered identities found in material and textual evidence. Students will reflect on how significant cultural changes, such as the conversion to Christianity and the expansion to the North Atlantic and to L'Anse aux Meadows, laid the foundation for what is considered gender appropriate in Western society.
CR: Archaeology 2494
PR: it is recommended, but not obligatory, that students should have successfully completed Archaeology 1000 or the former Archaeology 1030 or Gender Studies 1000
3000 Medieval Books (same as English 3002, History 3000, Religious Studies 3000) is an examination of the development and role of the manuscript book during the Middle Ages. Topics covered will include book production and dissemination; authors, scribes and audiences; and various kinds of books (e.g. glossed Bibles, anthologies, books of hours, etc.) and their uses.
CR: English 3002, History 3000, Religious Studies 3000
UL: this course may be substituted for a Greek and Roman Studies course in both the Classics degree programs (Honours, Joint Honours and general degree) and the Greek and Roman Studies degree programs (Honours, Joint Honours and general degree)
3001 Art, Architecture and Medieval Life (same as the former Anthropology 3589, Archaeology 3001, Folklore 3001, History 3020) is an examination of the development of medieval art and architecture and of the ways in which they mirror various aspects of life in the Middle Ages. This course will include a discussion of art and architecture in the countryside, in the town, in the castle, in the cathedral and in the cloister.
CR: the former Anthropology 3589, Archaeology 3001, Folklore 3001, History 3020

3003 Christian Thought in the Middle Ages (same as Religious Studies 3560) is a study of the development of Christianity in the West from the
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eleventh century to the eve of the Reformation, through an examination of its principal thinkers and the most significant societal forces and events: the crusades, the universities, monasticism, religious dissent and mysticism.
CR: Religious Studies 3560
3006 Women Writers of the Middle Ages (same as English 3006, Gender Studies 3001, and the former Women's Studies 3001) will study selections from the considerable corpus of women's writings in the Medieval period, as well as issues which affected women's writing. All selections will be read in English translation.
CR: English 3006, the former MST 3351, Gender Studies 3001, the former Women's Studies 3001

3110 Medieval and Renaissance Philosophy (same as the former MST 3004, Philosophy 3110, the former Philosophy 3760) examines developments in Philosophy from Augustine to Descartes, looking back on their dependence on Ancient and Hellenistic thought and forward to their influence on Modern philosophy. This course focuses on a particular question or figure during this period. Topics may include: universals and particulars, the existence of God, free will and determinism, the problem of evil, the status of nature, soul and body, and mysticism.
CR: the former MST 3004, Philosophy 3110, the former Philosophy 3760
PR: 6 credit hours in Philosophy courses at the 1000 or 2000 level
3200 Advanced Latin (same as Classics 3200) provides advanced knowledge of the Latin language while offering a window onto the culture and society of Ancient Rome. Students will begin to apply their knowledge to the close reading and interpretation of major works of Latin literature. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 3200, the former Classics 2205
PR: Classics 2200 or MST 2200
3270 Christianity and the Roman Empire (same as Classics 3270, History 3270, Religious Studies 3270) is a study of the relationship between Christianity and the Roman Empire from the first to the fourth century.
CR: Classics 3270, History 3270, Religious Studies 3270
3300 Advanced Ancient Greek (same as Classics 3300) provides advanced knowledge of the Ancient Greek language while offering a window onto the culture and society of Ancient Greece. Students will begin to apply their knowledge to the close reading and interpretation of major works of Ancient Greek literature. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: Classics 3300, the former Classics 2305
PR: Classics 2300 or MST 2300
3302 History of the French Language (same as French 3302 and Linguistics 3302) is a study of the origins of French, including the influence of Gaulish, Vulgar Latin, Frankish and the langue d'oc/langue d'oïl division, a survey of the dialects, morphology and syntax of Old French and of the evolution from Old to Middle French, including phonology, morphology, syntax and vocabulary.
CR: French 3302, Linguistics 3302
PR: 15 credit hours in French and/or Linguistics at the 2000 level or
permission of the Head of the Department; MST 1120 or Classics
1120 is strongly recommended
3592 Norse Archaeology (same as Archaeology 3592) explores the influence of the Vikings on the medieval world and the place of L'Anse aux Meadows within this cultural milieu. Students will be introduced to VikingAge archaeological and literary texts to gain knowledge of specific questions and problems concerning multicultural contact within the Viking-Age world, specifically the North Atlantic region. They will also gain an appreciation of the challenges associated with using interdisciplinary evidence as well as migration and multicultural issues in the past and present.
CR: Archaeology 3592, the former Archaeology 3685
PR: Archaeology 1000 or the former Archaeology 1030
3710-3729 Special Topics in Medieval Studies: Harlow is available only as part of the Harlow Campus Semester.
3828 The Middle Ages and the Movies (same as English 3828) explores the ways medieval sources are represented in modern films, and how modern cultural and political concerns influence how these medieval sources are presented. Through a selection of medieval films and their historical and literary inspirations, we will see how films shape our presentday concepts of history, identity, freedom, knowledge and creativity.
CR: English 3828
PR: 3 credit hours in English at the 2000-level
4000 Medieval Spanish Literature - inactive course.
4001-4020 Special Topics in Medieval Studies are seminars on such general, interdisciplinary or comparative subjects as, e.g., Popular Culture in the Middle Ages, The Medieval Stage, The Medieval Court, The Religious Orders, Women in Medieval Society, Medieval Universities, Scholasticism, Dante's Divine Comedy, Medieval Historiography, Arthurian Romance, Jewish Medieval Communities, Muslim Art and Architecture and The Byzantine World.

PR: 6 credit hours in MST courses at the 3000-level or above, or permission of the instructor

4021 Medieval Latin - inactive course.
4300 Middle High German Language and Literature I (same as German 4300) is an introduction to the German language, literature and culture of the eleventh to fifteenth centuries: historical linguistics, Middle High German grammar and the court epic.
CR: German 4300
PR: one of German 2011, 2511, 3011 or permission of the Head of the Department of Modern Languages, Literatures and Cultures

### 15.25 Police Studies

For Police Studies course descriptions see under Sociology, Police Studies.

### 15.26 Political Science

Political Science 1000 provides an introduction to the study of politics, power, law, public policy and government. Courses at the 2000-level offer an introduction to major fields and can be taken beginning in a student's first year of study. Courses at the 3000level usually assume that students have completed at least two courses in Political Science including the corresponding 2000-level introductory course. At the 4000-level, courses are advanced seminars with small enrollment caps, and therefore have formal prerequisites.
The second digit in each course number designates a field in Political Science. Students interested in notionally concentrating in an area may be guided in their course selections, as follows:
Second Digit
0 General \& Research techniques
1 Political theory
2 International politics
3 Comparative politics
6 Public policy and public administration
8 Canadian politics
9 Special topics
Enrollment in Political Science courses is limited. First priority is given to students registered as an Honours, Major or Minor in Political Science. During this time other students may be temporarily placed on a wait list.
A tentative list of upcoming Political Science course offerings can be found at www.mun.ca/hss/courses.php.
Political Science courses are designated by POSC.
1000 Introduction to Politics and Government is an introduction to basic concepts in the study of politics, power, law, public policy and government, touching on major areas of political ideologies, institutions, and current domestic and international political issues. Suitable for students in all disciplines.

1001 Critical Reading and Writing: Politics and Governance (same as the former POSC 2010) provides an overview of foundational knowledge and skills to enable critical reading and critical writing at the university level. Students learn the elements of academic assessment of literature and information that is available in the library and/or online, and about the mechanics of analytical writing. The "politics and governance" content varies by instructor and is not repeated in any other Political Science course. All sections of this course follow the Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
CR: the former POSC 2010
1010 Issues in Canadian Politics and Policy explores some of Canada's most pressing and interesting political and public policy issues. This course profiles important political problems facing federal and provincial politicians and society. Open to all students interested in Canadian politics, government and domestic public policy.
1020 Issues in World Politics explores some of the world's most pressing and interesting political issues. This course profiles important political problems, such as a power struggle within a particular country, a controversial topic that affects an entire continent, or a major crisis that has implications for inhabitants around the world. Suitable for students in all disciplines who have an interest in international politics.

2100 Introduction to Political Theory is a survey of the most important political thinkers and schools of political thought. The course will ordinarily cover major political thinkers and include a selection of contemporary political ideologies.
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CR: the former POSC 2000
2200 Introduction to International Politics is an examination of the "building blocks" of international politics including determinants, means, processes and ends. Emphasis is on the post-1945 period. All sections of this course follow International Studies guidelines available at www.mun.ca/ hss/IS.

2300 Introduction to Comparative Politics is an introduction to comparative politics and techniques of comparative analysis across political jurisdictions. This course focuses on the differences between, and similarities among, a variety of countries and systems of government.

2600 Introduction to Public Policy and Administration outlines major concepts in, and issues relating to, the fields of public policy and administration. Introduces students to major conceptual issues that shape public policy and government, such as agenda setting, types of public policy models and public management processes. Open to all students interested in the study of public policy and public administration.

2800 Introduction to Canadian Politics and Government is an introduction to the structure and operations of institutions of Canadian government and the nature of political actors. Topics to be examined may include the constitution, federalism, parliament, political parties, political culture and elections.
CR: the former POSC 2710
3010 Empirical Methods in Political Science is an introduction to basic concepts in the scientific approach to studying politics, and provides students with the fundamental skills for conducting empirical research using both qualitative and quantitative methods. These skills include how to construct a research project, and how to collect and analyze information. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
PR: 6 credit hours in Political Science at any level or the instructor's permission
3100 Political Theory from Plato to Rousseau examines selected political theory from Plato to Rousseau. The theme of the course is the development of liberal democratic theory.

3110 Political Theory from Tocqueville to Present examines selected political theory from Tocqueville to the present. The theme of the course is the crisis in liberal democratic theory.
3140 Feminist Political Theory examines feminist scholarship that has challenged previously accepted notions in political theory, including definitions of politics itself, the distinctions between public and private, the nature of citizenship, and the roles of women in civil society. This course considers different ways of looking at power and political culture in modern societies, examining theses such as gender and democracy, race and class, poverty and welfare, sexuality and morality.

3210 International Law is concerned with the interaction of international political and legal systems. Topics discussed are sources, agreements, membership, recognition, territory, jurisdiction, immunities, state responsibility, and force and war. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3220 International Organizations examines the origins, structures and roles of international organizations as both 'arenas' in which states pursue their interests and 'evidence' of an embryonic international society. The focus will be primarily on the workings of the United Nations, especially its 'collective security' function, and other regional security organizations. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/lS.

3230 The Global Politics of the End of the World (As We Know It) explores how human societies have imagined, predicted, and faced the prospects of the end of their world. Students will study recorded collapses of societies, the threat of modern and thermonuclear war, and current scholarship on planet politics and the Anthropocene. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/ IS.
3235 The First World War in International Politics explores the place of the First World War in International Relations. Topics to be reviewed are the international relations of the war, the place of the First World War in causes of war debates, and the effects of the war on International Relations and global politics. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3250 International Political Economy studies the interaction between world politics and international economics. Major theoretical debates regarding globalization and multinational corporations are covered, as well as current topics such as: the politics of the global monetary and financial order, international trade, foreign investment and debt, international development, and environmental issues. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3260 Global Food Politics examines the global governance of agriculture
and food, and explores how new global actors, institutions, and regulations shape the politics of food production, distribution, and consumption. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

3280 Foreign Policy is an introduction to the analysis of foreign policy, with special reference to domestic and international constraints, capabilities and ideology.
CR: the former POSC 3200, the former POSC 3760
3285 Sport and Politics in the Age of Globalization focuses on three points of interaction between sport and politics: the politics of sport, the use of sport by political actors, and the national and international aspects of sport governance i.e. the national and international regulation of sport by sport organizations, stakeholders and political authorities. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/ IS.

3290 Human Security examines political concepts and government policies related to international security contexts, such as the displacement of citizens, food supply issues, energy, information flows, war and/or the environment. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former POSC 3391
3295 Migration and Security explores how population movements, both within and across borders, impact international, national and human security. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
3300 European Politics is a comparative study of government and politics in selected states of Western Europe. Emphasis will be on parties, institutions, and policy-making, particularly the ways in which states manage their economies.
3305 Irish Politics introduces students to the politics of the Republic of Ireland. Topics covered include the historical origins of the state, the political influence of the Roman Catholic Church, the evolution of political institutions, as well as the evolving relationship with Northern Ireland, Europe and the world.
3310 American Politics examines the governmental process in the United States including the role of parties and interest groups. This course will also consider select contemporary problems.
3315 Latin American Politics I- inactive course.
3325 South Asian Politics - inactive course.
3340 Women and Politics examines the role of women in the political process in comparative context. Topics may include the political socialization, organization, and recruitment of women; voting behaviour; and the organization of governmental institutions as a response to the concerns of women
3350 Public Opinion and Voting looks at the measurement and formation of political attitudes, factors affecting attitude stability and change, and the distribution of opinion in society. Emphasizes public opinion and voting behaviour in the United States and Canada during campaigns and interelection periods. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.
CR: the former POSC 3510
3355 Sex, Scandals, and Elections considers questions related to political scandal and corruption in elections, focusing on voters' perceptions, media coverage, and party and candidate strategies to deal with corruption and scandals, in an effort to understand the impact of past scandals and the potential impact of future scandals for voters and electoral democracy.
3390 Political Parties is a study of political parties in liberal democracies. Attention is given to the origin and development of parties, how they organize, multiparty competition and what difference parties make. Political parties in Europe, the United States, and Canada are considered in a comparative context.
CR: the former POSC 3531
3600 Public Policy Fields is an examination of the relationship between public policy development and changes in the social and economic policy environment. Applies theories and models of public policy to a variety of topical case studies.
PR: prior completion of POSC 2600 is recommended but not required
3610 Public Administration in Canada is an introduction to public administration, history of the public service in Canada, an examination of the structure and functioning of contemporary federal and provincial governments. Topics covered include cabinet organization, financial and personnel management, collective bargaining, and bilingualism.
CR: the former POSC 3741
3620 Law, Governance and Public Policy reviews traditional theories about law, discuss their inadequacies, and consider the benefits of a policy-
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
oriented approach to the study of the role of law and governance in society. The concept of law as a process of authoritative decision will be used to examine the function of the judicial authority.
CR: the former POSC 3521
3650 Canadian Political Economy introduces students to major debates about the role of the state in Canadian economic development and public policy. Topics may include: the challenges of natural resource dependency, regionalism, globalization, and the relationship between Canada and the United States.
CR: the former POSC 3751
3800 Federalism in Canada examines relationships between government in the Canadian federation ranging from high-profile disputes to efficient diplomacy. This course reviews longstanding intergovernmental stresses such as the constitution, legislative powers, legal matters, sub-state nationalism (e.g., Quebec, Newfoundland, Labrador) and wealth distribution. CR: the former POSC 3710

3810 Executive-Level Governance in Canada explores the roles of political elites, such as prime ministers, premiers and ministers, and executive institutions in government such as the Prime Minister's Office and the Privy Council Office, in addressing and shaping important political issues in Canada.

3820 Constitutional Law in Canada uses a casebook approach to examine critical issues of Canadian constitutional law. The development of the Canadian Constitution and processes of judicial review, as well as the legal development of federalism and protection of civil rights, are examined in detail.
CR: the former POSC 3720
3830 Aboriginal Governance in Canada is an introductory course in Aboriginal governance. It examines Aboriginal culture and traditions, the variety of Aboriginal governments and governing traditions, and Aboriginal and treaty rights. Public policy issues and processes surrounding categories of Aboriginal peoples, intergovernmental relations affecting them, and the role and significance of Aboriginal political organizations and actions are explored.

3860 Media and Politics in Canada draws upon communications theory to analyze major political problems and processes. Specific attention is given to Canadian politics in the news and to various print, broadcast and online media.
CR: the former POSC 3511
3870 Provincial Government and Politics is a comparative study of government and politics in selected Canadian provinces and territories. Consequences of varying historical and cultural contexts will be examined with special attention to government processes, parties and movements, leadership styles, and orientations to the Canadian federation.
CR: the former POSC 3770
3880 Newfoundland and Labrador Government and Politics is a study of the government and political process in Newfoundland and Labrador. Topics may include electoral behaviour and attitudes, the party system, leadership styles, the consequences of federalism, and public administration.
CR: the former POSC 3780
3890 Municipal Government and Politics in Canada is an examination of the theory, structure and operation of local governments in Canâda, with particular emphasis on Newfoundland and Labrador. Recent proposals for reform and the politics of implementing regional government and financial reorganization will be examined.
CR: the former POSC 3790
3900-3979 Special Topics in Political Science will have topics announced by the Department.
CR: credit restrictions will be designated on a course-by-course basis
3980-3999 Special Topics in European Politics: Harlow is offered only at the Harlow (England) Campus and explore selected facets of the politics of contemporary Europe. Typical themes include the European Union and its member-states, asylum and immigration, social and economic policy, foreign policy and the position of Europe in the international system. For further information about the Harlow semester consult the Department or the Faculty of Humanities and Social Sciences.
CR: credit restrictions will be designated on a course-by-course basis
4010 Honours Essay I develops independent research and writing skills through regular meetings with a research supervisor, the preparation of an approved research proposal, and the completion of a high quality draft of at least one section of the Honours essay. Students are expected to follow the Department's "Guidelines Governing Honours Essays". Prior to enrolling, and ideally a semester in advance, students should contact the Head of the Department to identify a potential supervisor.
CR: the former POSC 4950
PR: enrollment in the Honours program and permission of the Head of the Department

4011 Honours Essay II builds on skills developed in POSC 4010, requires students to complete the writing of their Honours essay, including submitting a high quality complete draft at the midpoint of the semester, with the final complete document to follow soon afterwards. Students are expected to meet regularly with their research supervisor and to follow the Department's "Guidelines Governing Honours Essays".
CR: the former POSC 4951
PR: completion of POSC 4010 with a minimum grade of $70 \%$
4100 Approaches to Political Theory is an introduction to the interpretation of political texts. Features historical and hermeneutical approaches to the study of Political Science.

4110 Multicultural Citizenship examines discourses on multiculturalism in contemporary political theory from a normative perspective. Focuses on the justice and equality frameworks within which multiculturalism is understood, and the challenges arising from pluralism in democratic societies.
4120 Contemporary Democratic Theory examines significant debates in the contemporary scholarship on democratic theory, such as the relationship between democratic decision-making and individual liberty; who "the people" are in democratic states and how they make their will known; whether democracy depends upon a sense of collective identity; and whether democracy is inherently exclusionary.

4200 International Law and Politics is a research seminar on contemporary Canadian legal problems. Each semester will focus on one problem, such as Northern sovereignty, pollution, fishing zones or control of the sea.
PR: POSC 2200 and a POSC $32 x x$ course, or POSC 3210, or the
instructor's permission
4210 Arms Control and Proliferation examines the evolution of arms control within the context of global security and international public policy. It considers the consequences of success and failure. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/ IS. PR: POSC 2200 and a POSC 32xx course, or the instructor's permission
4215 Human Rights and International Politics examines the evolution of global norms of human rights and consequences for the structures of the international system, international civil society, and the international political process. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: POSC 2200 and a POSC 32xx course, or the instructor's permission
4230 Theories of International Relations examines the major theories used to understand world politics and international conflict, such as constructivism, feminism, game theory, historical structuralism, liberalism, and realism. These are explored through classic readings in international relations and case studies. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR:POSC 2200 and a POSC 32xx course, or the instructor's permission
4250 The European Union is an examination of the European Community as an emergent transnational form of governance. The course will consider the origins of the Community, the operation of its institutions, its trahsformation from Common Market to European Union, and the ways in which EC politics impinges on national-level politics.
CR: the former POSC 3291
PR: POSC 2200 and a POSC 32xx course, or POSC 3300, or the instructor's permission
4255 Controversies in Political Economy examines current political and public policy challenges from a political economy perspective. Topics may include globalization, major trade disputes, currency and debt crises, economic development and global environmental problems. All sections of this course follow International Studies guidelines available at www.mun.ca/ hss/IS.
CR: the former POSC 4350
PR: POSC 2200 and a POSC 32xx course, or the instructor's permission
4280 American Foreign Policy reviews the structures, process and major foreign policy perspectives of the United States of America in a global context.
CR: the former POSC 3200
PR: POSC 2200 or a POSC $31 x x$ course, or POSC 3310, or the instructor's permission
4290 The Developing World considers the practical and theoretical issues that affect the chances of the over five billion inhabitants of the developing world to secure democratic governance and material well-being. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: the former POSC 4380, the former POSC 4450
PR: POSC 2300 and a POSC 33xx course, or the instructor's permission
4310 Comparative Federalism examines theories of federalism along with the development and operation of federalism in selected nation states.
PR: POSC 2300 and a POSC $33 x x$ course, or POSC 3800 , or the
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).
instructor's permission
4320 Democracy and the Phantom Public considers the relationship between public opinion and representative government through a comprehensive review of theoretical perspectives and empirical debates in the study of mass political attitudes.

4325 Asian Politics analyses the history and development of political change in a selection of Asian states, with a focus on contemporary challenges that they face in a globalized political environment.

## 4330 Comparative Political Representation - inactive course.

4340 Women and Mass Politics focuses on the gender gap in both political behaviour and participation. Focusing primarily on Canada and the United States, this course assesses patterns of involvement in political institutions, and examines differences between men's and women's political attitudes.
CR: the former POSC 4503
4360 Contentious Politics - Protest, Violence and Terrorism examines protest and movement politics, insurgent and counter-insurgent politics, terrorism, and revolution.
CR: the former POSC 4740
PR: 3 credit hours in Political Science, or the instructor's permission
4370 Democracy and Democratization is a comparative study of the conditions necessary to develop and sustain democratic regimes and the circumstances under which transitions to democracy succeed or fail. The course will examine theoretical materials and apply them to recent and historical transitions to democratic rule.

CR: the former POSC 4301
PR: POSC 2300 and a POSC 33xx course, or the instructor's permission
4375 Politics of State-Making and State-Breaking examines how nationalism interacts with the creation and breakup of modern states. It explores the processes of national homogenization, and the political dynamics of multinational states, from nationalist challenges to constitutional change and successful and unsuccessful secession. It combines theoretical and conceptual materials with case studies from around the world.

4600 Public Policy Work Internship provides new career-related policy work experience with government, a political party, a non-governmental organization, a union, or another employer involved in public affairs. Placements are for twelve weeks at eight hours per week, totalling 96 hours. Course work related to the study of public policy is required. Admission is selective and competitive. Details are available at www.mun.ca/posc. Enrollment constitutes permission for the course administrator to provide the student's transcript to a potential employer.
CR: POSC 460 W , the former POSC 4000
PR: a minimum 60 credit hours, including at least 12 credit hours in Political Science courses with a minimum 70\% average, and permission of the instructor. Prior completion of public policy courses is recommended but not required.

4630 Policy Analysis reviews the variety of qualitative and quantitative techniques used in the analysis of public policy and in program evaluation. Students work on a major project to gain experience applying public policy models and analysis techniques as they attempt to improve a real-world existing public policy within the constraints of finite resources and political realities. Features practitioners as guest speakers who explain the role of policy analysts in the public policy process and the types of analysis practices.
PR: POSC 2600 or POSC 3600, or the instructor's permission
4650 Public Policy in Resource Dependent Economies examines the political economy of Canada's human and natural resources, such as labour, energy, fisheries, forestry, mining, and water. The political consequences of natural resource dependency on the environment and Aboriginals are also discussed.
CR: the former POSC 4731
PR: POSC 2600 or POSC 3600, or the instructor's permission
4680 Public Policy in Newfoundland and Labrador is a study of public policy in Newfoundland and Labrador. Examines the formation, implementation and impact of policies in one or more of the following areas: fisheries, resources, industrial development, agriculture, social policy.

## CR: the former POSC 4730

PR: POSC 2600 or POSC 3600, or the instructor's permission
4860 Elections in Canada is an examination of election campaigns and electoral systems in the Canadian political system, with an emphasis on candidates, parties, voters, electioneering activities and campaign regulations.
CR: the former POSC 3700
PR: POSC 2800 or the instructor's permission
4870 Regionalism in Canada is an examination of the economic, social, and institutional determinants of regionalism and the ways in which these forces have shaped decision-making in Canada. Emphasis on the various models and frameworks used to study regionalism.

CR: the former POSC 4750
PR: POSC 2800, or the instructor's permission
4880 Research in Newfoundland and Labrador Politics requires students to participate in advanced research projects dealing with selected aspects of the politics of Newfoundland and Labrador. Topics to be considered may include the legislature and the executive, the civil service, interest groups, parties, elections and political recruitment.
CR: the former POSC 4780
PR: 6 credit hours in Political Science, or the instructor's permission
4900-4990 (Excluding 4950 and 4951) Special Topics in Political Science will have a seminar topic announced by the Department.
CR: will be designated on a course-by-course basis
PR: will be designated on a course-by-course basis

### 15.26.1 Work Terms

The following Work Terms are requirements for the Bachelor of Arts Honours (Co-operative) and Bachelor of Arts (Cooperative) programs only.
260W Work Term 1 for most students this represents their first work experience in a professional environment. They are expected to learn, develop and practice the high standards of behaviour normally expected in the workplace. They are normally required to attend seminars on professional development.
CH: 0
OR: Professional development seminars, delivered by Co-operative Education, are presented in the previous semester to introduce and prepare the student for participation in the subsequent work terms. Topics may include, among others; résumé preparation; interview training; work term evaluation; preparation of reflective essays; career planning employment seeking skills; self-employment; ethics and professional concepts; behavioural requirements in the workplace; assertiveness in the workplace; and industrial safety.
PR: enrollment in the Political Science Co-operative Education
Program (PSCE); 18 POSC credit hours; a minimum overall average of $65 \%$ and a minimum average of $70 \%$ in POSC courses; and permission of the designated faculty member. A candidate for a Political Science Honours or Major who completed a minimum of 18 credit hours in Political Science prior to September 2011 and who is not pursuing the co-op option may apply to enroll in POSC 260 W . Priority will be given to PSCE students.
360W Work Term 2 building on their first work term placement students will futher develop their knowledge and work-related skills in a position that entails increased responsibility and challenge. Students are expected to demonstrate an ability to deal with increasingly complex work-related concepts and problems.
CH: 0
PR: enrollment in the Political Science Co-operative Education Program (PSCE), 27 POSC credit hours; POSC 260W; a minimum overall average of $65 \%$ and a minimum average of $70 \%$ in POSC courses; and permission of the designated faculty member
460W Work Term 3 building on their previous work term placements and Political Science course knowledge students will be assigned to a highly challenging position and evaluated on related academic components. They should have sufficient academic grounding and work experience to contribute in a positive manner to the problem-solving and management processes needed and practiced in the work environment. Students should become better acquainted with their discipline of study; should observe and appreciate the attitudes, responsibilities and ethics normally expected of professionals; and should exercise greater independence and responsibility in their assigned work functions.
CH: 3
CR: POSC 4600
PR: enrollment in the Political Science Co-operative Education
Program (PSCE); a minimum third-year standing and 33 POSC credit hours; POSC 360W; a minimum overall average of $65 \%$ and a minimum average of $70 \%$ in POSC courses; and permission of the designated faculty member.

### 15.26.2 Law and Society

A tentative list of upcoming Law and Society course offerings can be found at www.mun.ca/hss/courses.php.
Law and Society courses are designated by LWSO.
1000 Law, Democracy and Social Justice examines the nature and aims of democracy and contemporary issues related to social justice through a law and society perspective.

2000 Law and Society in Canada is an introduction to law in Canadian society and the role which it has played in societies past and present.
PR: LWSO 1000
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

3010-3019 (Excluding 3012, the former 3013, 3014, 3015 and 3016) Special Topics in Law and Society will have topics to be studied announced by the Program Coordinator.
PR: LWSO 1000
3012 Aboriginal Peoples: Concepts of Land, the Law and the Constitution traces the historical development of Aboriginal land and resource rights; colonial and Canadian law; and the Constitution of Canada as it relates to the Indian, Inuit and Metis people of Canada. The developing concept of Aboriginal law is presented within the context of the treaty process, Indian Act, contemporary land claims, the Canadian Constitution, and federal/provincial relations.
PR: LWSO 1000. LWSO 2000 is recommended
3014 Aboriginal and Government Relations in Newfoundland and Labrador traces the historical development of Aboriginal and Government relations in Newfoundland and Labrador. Topics include: the current legal and constitutional status of the Inuit, Indian and Metis people within the context of land claims, application of the Indian Act, access to programs and services, and federal/provincial relations.
PR: LWSO 1000. LWSO 2000 is recommended
3015 Women and Law in Canada looks at the interplay between law and status under the law, the course proceeds to look at some of the main legal issues affecting women today, such as workplace equality, family law and women and crime. This course provides students with the opportunity to study cases in depth and apply legal theory to current issues affecting Canadian women.
PR: LWSO 1000. LWSO 2000 is recommended
3016 Western Traditions of Law and War provides students with a historical overview of the law of war. The course goes beyond the traditional legal definition of war as an armed conflict between states, and examines whether the law of war should be applied to terrorism and wars of national liberation. Topics include: just war theory, the legality of the various means of warfare, the treatment of protected people and places and the prosecution of war criminals.
PR: LWSO 1000
3200 Women and the Law in Newfoundland History - inactive course.
3300 Understanding Human Rights introduces students to the theory and practice of human rights. Course topics include: history; philosophy; and international and Canadian structures and provisions. The course includes an examination of selected areas of human rights, i.e. labour, women's and children's rights, and explores current and future applications of human rights.

## PR: LWSO 1000

3400 Organized Crime in Canada: National and Global Perspectives examines the origins, expansion, and changing character of organized crime in Canada from the early twentieth century to the present. Laws relating to criminal activity, law enforcement and available tools to combat organized crime are assessed according to the inherent problems of investigation, evidence, and litigation.
PR: LWSO 1000. LWSO 2000 is recommended.
4000 Multidisciplinary Perspectives on Law and Society is an appreciation and understanding of those rules and activities termed legal which can be gained from a variety of disciplinary perspectives. The purpose of this seminar is to introduce students to the different ways in which law may be approached within the social sciences and humanities. The topic or topics to be discussed in a given semester will depend on the availability and participation of faculty from participating departments. Through seminar readings, discussions and research, students will gain a wider understanding of the role of law in society and of the diverse academic approaches for understanding it.
PR: at least 18 credit hours from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including LWSO 1000
4900 Development of Law in Newfoundland traces the evolution of the legal system of Newfoundland and Labrador from its earliest beginnings. Students are responsible for contributing to seminar discussions and presenting a research essay on some major themes that distinguish legal developments in Newfoundland and Labrador.
CR: the former History 4214, the former History 4232
PR: at least 18 credit hours from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including LWSO 1000
4901-4909 Special Topics in Law and Society will have topics to be studied announced by the Program Coordinator.
PR: at least 18 credit hours from Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major or Minor in Law and Society, including LWSO 1000

### 15.27 Religious Studies

A tentative list of upcoming Religious Studies course offerings can be found at www.mun.ca/hss/courses.php.
Religious Studies courses are designated by RELS.
1000 The Religions of the World is an introduction to the beliefs and practices of the world's religions.
CR: the former RELS 2010
1001 Critical Reading and Writing: Religion and Violence examines the relationship between religion(s) and violence from Religious Studies perspectives. Students learn the principles of scholarly analysis appropriate to the study of religious phenomena, the elements of academic assessment, and the mechanics of academic writing. Emphasis is placed on critical reading and writing, analyzing texts, evaluating sources, framing questions organizing paragraphs, developing effective arguments, and refining presentation of written work. All sections of this course follow Critical Reading and Writing Course Guidelines available at www.mun.ca/hss/crw.
1040 Introduction to Chinese (Mandarin) I will introduce students to the basics of Chinese vocabulary, characters, and grammar. Mandarin Chinese, the official dialect of China, Taiwan, and Singapore, will be taught. This course is not intended for native speakers. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls. CR: the former RELS 4904

1041 Introduction to Chinese (Mandarin) II is a continuation of RELS 1040. At the end of this course students should know over a hundred Chinese characters, which should enable them to read basic texts and carry on a simple conversation. This course is not intended for native speakers. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 4911
PR: RELS 1040
1050 Introduction to Biblical Hebrew lis designed to introduce students to the elements of Biblical Hebrew in order to prepare them for reading the Hebrew Bible/Old Testament in the original, The emphasis will be upon learning the basic grammar and syntax of Biblical Hebrew. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 3700, the former RELS 4900
1051 Introduction to Biblical Hebrew II is a continuation of RELS 1050. The emphasis will be upon the reading of selected Hebrew texts. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 3701, the former RELS 4901
PR: RELS 1050
1060 Sanskrit Language Study I is an introduction to the Sanskrit language, to the (Devanagari) alphabet, basic grammar and foundational vocabulary with a focus on developing skills needed to read and translate Sanskrit texts. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 4905
1061 Sanskrit Language Study II is a continuation of Sanskrit Language Study I. On completion of this course, students will have the ability to consult Sanskrit texts for research purposes. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 4906
2013 Christianity is a study of the Christian tradition, its development and variety. The course will include an examination of the beliefs and practices of both Eastern and Western Christianity and a study of the main differences among the major Western denominations.
CR: the former RELS 2130, 2140
2021 Apocalypse: The End Times in Thought, Action, and Imagination (same as the former RELS 1021) will explore the many ways in which Judaism and Christianity have anticipated and imagined the end times. Attention will be given to Jewish and early Christian notions of the Messiah and his reign, the end of the world, and the impending judgment, as well as how Christianity has coped repeatedly with the delay of the end and how millennial thought and action have affected people during periods of social and natural crises. The role of millennial expectations in our modern era and why the apocalypse is once again a powerful image in religion, film, and literature will also be covered.
CR: the former RELS 1021
2022 Jesus at the Movies (same as the former RELS 1022) examines how Jesus has been dramatized in film, investigating the reception of select Jesus films and cinematic Christ figures in academic, religious, and popular cultures, and reflecting on the sources and intentions informing the filmmaker's work.
CR: the former RELS 1022
2050 The Old Testament is an introduction to the historical background,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).
literary structure, and content of the Old Testament. Emphasis will be placed on the authorship and dating of the various texts that comprise the Old Testament, as well as on major themes, figures, and events.

2051 The New Testament is an introduction to the history and literary structure of the documents comprising the New Testament. Emphasis will be placed on the major themes found in these documents and on the distinctiveness of approach of the individual writers.

2070 Philosophy of Religion (same as Philosophy 2070) explores the philosophical aspects of religious belief, religious language, and theology. CR: Philosophy 2070, the former Philosophy 3500, the former Religious Studies 3500

2180 Jerusalem and the Politics of Sacred Space takes a socialconstructivist approach in examining how narrative, ritual, and architecture are deployed in making a place sacred. The focus is on the city of Jerusalem, its place in the history and symbolism of three religious traditions (Judaism. Christianity and Islam), and the potential tensions and conflicts involved in processes of creating sacred geographies.

2205 History of Medieval Philosophy same as Philosophy 2205, Medieval Studies 2205) examines and traces the historical developments of a number of philosophical themes, questions, and ideas throughout medieval philosophy by reading, analyzing, and discussing selected primary texts from philosophers and theologians from the 4th to 14th centuries. Authors may include Augustine, Proclus, Boethius, Al-Farabi Ibn Sina, Anselm, Ibn Rushd, Maimonides, Aquinas, Bonaventure, Scotus, and Ockham, among others.
CR: Philosophy 2205, Medieval Studies 2205
2330 Judaism is an introduction to central beliefs and practices of the Jewish faith, from its beginnings to the modern era.
2340 Islam examines the tradition in its historical and contemporary manifestations; Muhammad, the Qur'an, Islamic sects, relations with Judaism and Christianity; trends and developments in contemporary Islamic thought and practice.
CR: the former RELS 3340
2350 Religious Institutions (same as Anthropology 2350) is a contextual study of religious institutions and beliefs, calendrical feasts and solemnities religious roles and hierarchies, ritual innovation and revitalization.
CR: Anthropology 2350, the former Sociology/Anthropology 2350, the former Sociology 2350

2400 Buddhism examines the history of Buddhist traditions in Asia, with consideration of the major developments in Buddhist philosophy, institutions, and practices.
CR: the former RELS 3400
2410 Hinduism examines the history of Hindu religious traditions, their major religious texts, institutions, and practices, and their role in social, political, and cultural movements in India and in Hindu diaspora communities.
CR: the former RELS 3410
2415 Gods and Goddesses of Hinduism focuses on myth, iconography and ritual of Hindu gods and goddesses from the ancient to the contemporary period. The course explores fundamental assumptions of Hindu theistic traditions in popular practice and in formal religious institutions.

2420 Chinese Philosophy and Religion examines philosophical and religious responses to social and political crises in ancient China. Finding ways to answer the crises of prolonged warfare, high unemployment, and a vast divide between rich and poor gave rise to the schools of Confucianism, Daoism, Legalism, and others. This introductory course examines the various schools' answers to these crises and how they connect to today.
2425 Contemporary Issues in Chinese Religion and Culture is an examination of religion in modern China and the Chinese diaspora in Taiwan, Singapore, and North America. Special attention will be paid to religious beliefs, practices, and institutions and the way in which modern attitudes have been framed by the past.
CR: the former RELS 3425
2430 Japanese Religions is an introduction to the history and development of Shinto and Buddhism in Japan. In the 20th and 21st centuries we will see the phenomenal growth of the "new religions" and their impact on everything including anime.
CR: the former RELS 3430
2610 Introduction to Religious Ethics is an introduction to religious ethics through the systematic study of selected writers and issues in biomedicine, human sexuality, and social justice. Possible topics for discussion include euthanasia, abortion, poverty, and unemployment.
CR: students who have successfully completed both the former RELS 2600 and the former RELS 2601 may not receive credit for RELS 2610

2800 Gender and Sexualities in Western Religions examines attitudes toward, and treatment and construction of gender and sexualities in Western religions, including Judaism, Christianity, Islam, and New Religious Movements. Contemporary evaluations of these traditions from gender studies perspectives will be considered.
2801 Gender and Sexualities in Asian Religions examines gender and sexuality in the traditions of Hinduism, Buddhism, Confucianism, Daoism and folk traditions in Asia. Contemporary evaluations of these traditions from gender studies perspectives will be considered.
2810 Religion and Science is an historical examination of the dynamic interaction of religion and science in modern Western culture. In addition to classic case studies such as the Galileo affair, Darwin's evolutionary theory, and the 1925 Scopes 'Monkey Trial', the course asks whether science and religion are inherently at 'war' with each other or whether they have points of contact and perhaps even integration.
2811 Contemporary Religious Movements explores the development and forms of modern, western spiritualties, such as modern witchcraft, Neopagan religions, Mother Earth spirituality, UFO religion and the New Age Movement.
2812 Religion and Popular Culture analyzes the portrayal and treatment of religion in popular culture and the ways in which religious and mythic themes are communicated through a variety of media forms including television shows, films, music, mass-market fiction, and material culture.
2830 Religion and Popular Music explores the religious themes and images found in popular music and song, considering the role of music as a vehicle for religious expression.

2850 Religion and the Law in Contemporary Canada examines contemporary legal debates on the place and contours of 'religion' in Canada. Through consideration of a number of post-Charter Supreme Court of Canada decisions, as well as sociological research on different religious communities, we delve into the changing meanings of religious diversity in Canada.
2900-2930 Intermediate Language Studies: Special Subjects provide students with intermediate training in languages necessary for studying ancient religious texts. The languages presently offered through the Department are Mandarin Chinese, Biblical Hebrew, and Sanskrit. All sections of these courses follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
CR: the former RELS 4902-4910 and 4311 in the corresponding language: Mandarin Chinese, Biblical Hebrew, or Sanskrit
PR. 6 credits at the first year level of study in the corresponding language: Mandarin Chinese (RELS 1040 and 1041), Biblical Hebrew (RELS 1050 and 1051), or Sanskrit (RELS 1060 and 1061)
3000 Medieval Books (same as English 3002, History 3000, and Medieval Studies 3000) is an examination of the development and role of the manuscript book during the Middle Ages. Topics covered will include book production and dissemination; authors, scribes and audiences; and various kinds of books (e.g. glossed Bibles, anthologies, books of hours, etc.) and their uses.
CR: English 3002, History 3000, and Medieval Studies 3000
3010 Greek Religion (same as Classics 3010) is a study of the role of religion in the private and public life of the Greek world.
CR: Classics 3010, the former RELS 3121, the former Classics 3121
3020 Roman Religion (same as Classics 3020) is a study of the role of religion in the private and public life of the Roman world.
CR: Classics 3020, the former RELS 3121, the former Classics 3121
3031 The Book of Genesis introduces students to one of the founding texts of Western culture, the book of Genesis. Special attention will be paid to the role of myth, human origins, values, and political institutions.
CR: the former RELS 3030
3053 Anthropology of Religion (same as Anthropology 3053) is a critical evaluation of anthropological research on religion, centering on seminal thinkers and major theoretical traditions. Special attention is given to the study of belief systems, and to relationships between belief and ritual.
CR: Anthropology 3053
3058 Topics in Religion and Politics is a seminar-based course which offers socio-political and philosophical analyses of the impacts of religion in specific political contexts taking a variety of theoretical approaches. The geographical and historical foci of the course will vary by instructor.

3060 The Prophets of Israel is a study of the prophets through the relevant books of the Old Testament. Problems of text and interpretation will be discussed in relation to selected passages, but the general approach will be to bring out the creative genius and radical implications of the prophetic movement as a whole.

3091 The Problem of Justice in the Old Testament introduces students to the universal problem of divine justice as it is depicted in various biblical
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).
books. Special attention will be placed on the book of Job, but notions of suffering in the Psalms, Jeremiah, Proverbs, Ecclesiastes, and some apocryphal literature will also be considered.
CR: the former RELS 3090
3200 Jesus of Nazareth is a study of the historical Jesus. Beginning with an assessment of the relevant source material, this course explores what can be known about the life of Jesus of Nazareth in its historical and cultural contexts.

3210 Paul and His Writings is a study of the writings of the Apostle Paul in the New Testament, and his contribution to Christianity in the cultural and historical milieu in which he lived and was active.
3251 The Gospel of John is an examination of the Gospel of John and the community which produced it. Special attention will be given to the place of the Gospel in the history of early Christianity.
3270 Christianity and the Roman Empire (same as Classics 3270, History 3270, Medieval Studies 3270) is a study of the relationship between Christianity and the Roman Empire from the first to the fourth century.
CR: Classics 3270, History 3270, Medieval Studies 3270
3276 Contemporary Issues and the Bible examines the relevance of the Bible to such issues as climate change, capitalism, and technology and freedom.
CR: the former RELS 3275
3305 Ancient Israel is an exploration of the religious thought and practices of Israel and Judah in their cultural and historical contexts in the Old Testament period, from their beginnings to the Babylonian Exile of the sixth century B.C.E.
CR: the former RELS 3050
3310 Judaism at the Time of Jesus will explore the developments in Jewish thought, institutions, beliefs, and practices from the Babylonian Exile of the sixth century B.C.E. to the time of Jesus, King Herod and the Roman Empire of the first century C.E.
CR: the former RELS 3220
3401 Zen, Buddhist Meditation, and Buddhist Psychology examines Buddhist psychology in Tibetan and Zen Buddhism and compares that to modern Western understandings.

3411 The Ramayana: A Hindu Epic and Performance Tradition is a study of one of the most influential Epics of Hinduism, the story of Rama, the perfect king of a golden age. The course examines various versions of the narrative, the social and religious values expressed through the story, and the Epic's place in Indian politics, in dramatic performances, and in visual arts.
3415 Warrior, Wife, Witch: Ideal Females and Female Ideals in Hinduism - inactive course.

3431 Readings in Daoism: The Laozi and the Zhuangzi is a course in the critical reading of the two most important texts in Daoism, the Laozi and the Zhuangzi.
CR: the former RELS 3420, the former RELS 3422
3432 Confucius and Confucianism begins with Confucius and China, and explores the growth and impact of Confucianism on East Asian society through an examination of its major writings.
CR: the former Religious Studies 3420, the former Religious Studies 3421
3500 Philosophy of Religion (same as the former Philosophy 3500) explores the philosophical aspects of religious belief, religious language, and theology.
CR: the former Philosophy 3500
3510 Christianity in the Reformation Era - inactive course.
3535 Christianity in the Modern Era - inactive course.
3540 Christianity, Violence and Corruption introduces students to the thought of René Girâd and Ivan Illich. Girard engages with anthropology, literature, the biblical tradition, and Christian thought in developing a conflict theory of social origins, and the relationship between religion and violence. Illich, one of modernity's fiercest critics, argues that modern social institutions are indebted to Christianity, but also that these institutions, including the church, are a corruption and perversion of the New Testament.
3560 Christian Thought in the Middle Ages (same as Medieval Studies 3003) is a study of the development of Christianity in the West from the eleventh century to the eve of the Reformation, through an examination of its principal thinkers and the most significant societal forces and events: the crusades, the universities, monasticism, religious dissent, and mysticism.
CR: Medieval Studies 3003
3600 Ancient Myth and Cult (same as Classics 3600) develops the students' knowledge of myth and material culture by examining specific religious sites in the Greek and Roman world as foci of ritual practice.

Students will learn to integrate knowledge of the physical remains with the literary and ritual evidence in order to obtain a more integrated understanding of religious life in ancient Greece and Rome.
CR: Classics 3600
3640 Religion and Bioethics is an examination of the religious ethics of health care in the light of foundational concepts of bioethics. Topics to be discussed will include the relation of religion and medicine, as well as specific issues such as abortion, euthanasia, and genetic engineering.

3650 Religion and Social Justice is a study of social justice issues that arise from an investigation of economic and political systems from the perspective of religious ethics. Topics addressed may include environmental ethics, ecofeminism, gender equity, pacifism, civil disobedience, poverty, and social welfare questions.

3680 Religion and the Problem of Evil is a study of religious approaches to the problem of evil. Attention will be paid to both traditional and contemporary efforts among the world's religions to address the problem. CR: the former RELS 4800

3800 Re/Presentations of Muslim Women: Gender, Colonialism and Islam is presented in three parts. Firstly, there will be a grounding theoretically in Islam, Orientalism, feminism and contemporary political implications related to the study of Muslim women. Secondly, there will be a consideration of topics which have served as explanations for the "difference" of Muslim women in various contexts, both in contemporary Muslim majority and minority political situations. Lastly the course concludes by considering a variety of contemporary ethnographic representations of Muslim women in Egypt, Palestine, France, Turkey, Cyprus and Malaysia.
3810 Religion, Society, and Culture is a study of modern attempts to analyze, interpret, and reassess the place and significance of religion in human life. Attention will be given to thinkers such as Nietzsche, Marx, Freud, and Durkheim.

3811 Contemporary Alternative Spirituality is an in-depth examination of one or more forms of contemporary alternative spirituality in historic and contemporary contexts. Students will study the writings of practitioners of alternative spirituality, as well as social-scientific studies of alternative spiritual groups. Religious movements to be explored include Spiritualism, and may also include Neo-paganism, the New Age Movement, and/or UFO spirituality as relevant.
3812 Religion and Disney Films: Not Just Another Mickey Mouse Course provides an in-depth examination of religious themes and issues arising from and within the philosophies of Walt Disney, Disney animated films, and other Disney entertainment products. Theoretical models drawn from the field of Religion and Popular Culture will provide the lens through which the religious dimensions of Disney films will be explored.
PR: completion of RELS 2812 is recommended but not required
3820 Religion and the Arts (same as Visual Arts 3820) is an examination of the role of art in the expression of religious ideas, together with a study of specific religious themes and concerns in one or more of the following: literature, film, music, painting, sculpture, and dance.

## CR: Visual Arts 3820

3840 Rites of Passage is an introduction to the scholarly study of ritual, focusing on lifecycle transitions: birth and initiation rites, weddings, and funerals. In addition to studying practices from a range of religious traditions, consideration is given to contemporary images, perceptions, and stories of passage, as well as to classical rites of passage theory.

3860 From Elvis to the Undertaker: Religion Outside the Box is an indepth examination of the concept of implicit religion. The course will explore the concept of "the sacred" through an examination of the ideas of such theorists as Eliade, Turner, and Bailey and will examine the claims of some Religious Studies scholars that the sacred can be found in secular contexts.

3880 Religion, Worldviews, and the Environment examines the human connection to the natural world as expressed in traditional religions, indigenous worldviews and contemporary approaches to environmental crises.

3900 Religion in Newfoundland and Labrador: Beginnings - inactive course.

3901 Religion in Newfoundland and Labrador: The Nineteenth and Twentieth Centuries - inactive course.

4001 Religious Texts and Traditions is an advanced seminar course which examines religious texts from a variety of religious traditions. Study may involve an exploration of sacred texts, traditions, and their interpreters. Content will vary with instructor.
4002 Religion, Culture, and Society is an advanced seminar course which concerns religious themes and issues as they affect culture. Study may involve the exploration of institutions, rituals, built environments, and spaces.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

Content will vary with instructor.
4300-4330 World Religions: Special Subjects are courses which will be offered at the discretion of the Department. They are designed to provide an opportunity for students majoring in Religious Studies or doing a strong concentration of courses in the area to pursue advanced study under tutorial supervision.

## PR: permission of the Department

4460 Folk Religion (same as Folklore 4460) examines how established global religions and new forms of spirituality manifest themselves and are religion as it is "lived" on a daily basis in a variety of local contexts worldwide. It focuses primarily on forms of belief and spirituality that are informally expressed. Drawing upon various cultural contexts, the course addresses such notions as space and time; metaphysical powers; religious material culture, music, and verbal art; and the role and power of the holy person. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: Folklore 4460, the former Folklore 4240
4801-4830 (Excluding 4812) Religion, Ethics, and Modern Culture: Special Subjects are courses which will be offered at the discretion of the Department. They are designed to provide an opportunity for students majoring in Religious Studies or doing a strong concentration of courses in the area to pursue advanced study under tutorial supervision.
PR: permission of the Department
4812 Religion in Disney Parks will introduce students to a variety of theoretical concepts, and provide students with the opportunity to apply these concepts in the field at Walt Disney World in Orlando, Florida or other Disney theme park. Concepts to be explored include civil religion, hyper-real religion, and religious consumerism; Disney's constructed pasts, futures and the global village will also be explored. AR: attendance is required in a field trip outside of Canada for which students incur the financial costs. Normally the field trip is held during the Winter semester break.
AR: attendance is required in a field trip outside of Canada for which
students incur the financial costs. Normally the field trip is held during the Winter semester break.
PR: RELS 2812, RELS 3812, or RELS 3860, or permission of the instructor
4998 Comprehensive Examination prepares students to write comprehensive examination at the end of the term, on a chosen area of specialization in Religious Studies. To complete the Honours Program in Religious Studies, students must successfully complete either the Honours Essay (RELS 4999) or the Comprehensive Examination.
PR: enrollment in the Honours program and 6 credit hours in Religious Studies courses at the 3000 level

4999 Honours Essay develops independent research and writing skills through regular meetings with a supervisor, the preparation of an approved research proposal, and the completion of the final Honours essay by the end of the semester. Prior to enrolling, ideally a semester in advance, students must contact the Head of the Department to identify a potential supervisor. To complete the Honours Program in Religious Studies, students must successfully complete either the Honours Essay or the Comprehensive Examination (RELS 4998).
PR: enrollment in the Honours program and permission of the Head of the Department

### 15.28 Russian Language and Literature

The Department offers several courses in Russian during the Spring/Summer semester. See the Departmental web page at www.mun.ca/german/russian/course_descriptions.php for details on the Russian Summer Program.
A tentative list of upcoming Russian Language and Literature course offerings can be found at www.mun.ca/hss/courses.php. Russian courses are designated by RUSS.
1000 Elementary Russian I provides an introduction to Russian grammar and a basic knowledge of the spoken and written language. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.

1001 Elementary Russian II is a continuation of Elementary Russian I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: RUSS 1000 or equivalent
1050 The Making of Modern Russia develops a critical understanding of how new and old media (literature, film, and web-based media) reflect and inspire change in the history of modern Russia, with an orientation towards the contemporary moment.

2010 Intermediate Russian I continues RUSS 1000/1001 including more complex concepts of basic grammar and introducing Russian texts from literature and newspapers. All sections of this course follow the Language

Study Course Guidelines available at www.mun.ca/hss/ls.
PR: RUSS 1000 and 1001 or equivalent
2011 Intermediate Russian II is a continuation of Intermediate Russian I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: RUSS 1000 and 1001 or equivalent
2030 Russian for Reading I is designed to foster a reading knowledge of Russian relevant to professional, business or academic disciplines. It is intended for senior undergraduate or graduate students, as well as professional and business people. No previous knowledge of Russian is required. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.

2031 Russian for Reading II is a continuation of Russian for Reading I. All sections of this course follow the Language Study Course Guideli available at www.mun.ca/hss/ls.
PR: RUSS 2030 or 1001, or permission of the Head of the Department
2440 The Russian Utopian Imagination is a survey of Russia's unique contribution to the utopian tradition, nationally and internationally, and in revolutionary moments past, present and future. While literature is the focus of the course, other media including architecture, film, and other forms of print will also be considered.

2510 Intermediate Composition and Conversation I is an intensive course which focuses on improving vocabulary and fluency in speaking and writing Russian. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss//s.

2511 Intermediate Composition and Conversation II is a continuation of RUSS 2510 including more complex concepts. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ Is.

2600 Russian Literature in Translation: Nineteenth Century is a study of selected works of Russian authors including Pushkin, Lermontov, Gogol, Turgenev, Tolstoy, Dostoyevsky, Chekhov. This course qualifies as a Research/Writing course.
2601 Russian Literature in Translation: Twentieth Century is a study of selected works of Russian authors of the pre-revolutionary, Soviet and postSoviet periods. This course qualifies as a Research/Writing course.
2900 Russian Culture 1 is a study of the evolution of Russian culture and Russian intellectual history up to 1917. Lectures include discussions of Russian art, music and film. Lectures are given in English. This course qualifies as a Research/Writing course.
2901 Russian Culture II is a study of the evolution of Russian culture in the USSR and the post-Soviet period. Lectures include discussions of Soviet Russian art, music and film. Lectures are given in English. This course qualifies as a Research/Writing course.

3000-3009 (Excluding 3003 and 3005) Special Topics in Russian Studies will deal with topics as announced by the Department.
3003 Russian and Soviet Film Until 1948 begins with the origins of film in Russia in the late imperial era, and then proceeds to follow the development of film in Russia and the Soviet Union until the death of Sergei Eisenstein following World War II. Our focus is on a selection of artistically, culturally, and politically important films from this period.
UL: may not be used as part of the Faculty of Humanities and Social Sciences requirement of 6 credit hours in a second language

3005 West to East: Aspects of the German Intellectual Influence on Russia (same German 3005 and History 3005) examines the fluidity of ideas across geo-political borders, languages and cultures, by exploring how the German intellectual discourse was received and reinterpreted by Russians in their literary, artistic and cultural dialogue. Ideas about the Romantic Hero become conflated with theories involving the Will, the Nietzschean Superman and the Proletarian Revolutionary, personified and embodied in what some scholars characterize as political/cultural Gods (Lenin, Stalin, Hitler).
CR: German 3005, History 3005
3010 Advanced Russian I is an advanced study of literary texts, grammar, composition and translation with practice in the spoken language. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: RUSS 2010 and 2011
3011 Advanced Russian II is a continuation of Advanced Russian I; emphasis is placed on advanced grammar and reading of selected texts from Russian short stories, magazines and newspapers. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: RUSS 2010 and 2011
3023 Post-Stalin Russia: Media and Film is an examination of
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contemporary Russian visual media with attention to the cultural discourse concerning Russian history and cultural identity.

3440 Mushrooming \& Mushroom Clouds: The Russian Ecological imagination addresses ecological concerns past, present, and future through the lens of imaginative production. A wide range of Russian novels, short stories, science writing and film will be used to explore how narrative not only represents nature but also produces it.

3900 Survey of Russian Literature I is a study of masterpieces by representative Russian authors of poetry and prose with particular emphasis on stylistic characteristics of the authors studied and the evolution of the Russian literary language.
PR: one of RUSS 2011, 2511, 3011, or permission of the Head of the Department

3901 Survey of Russian Literature II is a continuation of RUSS 3900.
PR: one of RUSS 2011, 2511, 3011, or permission of the Head of the Department

3910 Post Perestroika Russia explores contemporary issues concerning the changes (artistic, political, cultural, economic) and sense of rediscovery in modern Russia in the context of works by present-day writers.
4001-4010 (Excluding 4002) Special Topics in Russian will deal with topics as announced by the Department.

4002 Giants of Soviet Cinema focuses on the oeuvres of one or two directors, or a movement or era within Soviet Cinema. Students will examine films closely according to their artistic structures and historical contexts, applying a broad range of classic readings on film theory to help inform analysis.

4100 Russian Literature of the Nineteenth Century I is a study of major Russian authors, including Pushkin, Lermontov, and Gogol.
PR: one of RUSS 2011, 2511, 3011, or permission of the Head of the Department

4101 Russian Literature of the Nineteenth Century II - inactive course.
4200 Russian Literature of the Twentieth Century I - inactive course.
4201 Russian Literature of the Twentieth Century II is a study and analysis of texts by modern Russian writers.
PR: one of RUSS 2011, 2511, 3011, or permission of the Head of the Department
4800 Special Topics in Russian Studies I will deal with topics as announced by the Department.
4801 Special Topics in Russian Studies II will deal with topics as announced by the Department.

### 15.29 Sociology

A tentative list of upcoming Sociology course offerings can be found at www.mun.ca/hss/courses.php.
Sociology courses are designated by SOCI
1000 Introduction to Sociology is an introduction to the concepts, principles, and topics of Sociology. This course is a prerequisite to most departmental courses.

## CR: the former SOCI 2000

2100 Social Inequalities introduces the subject of social inequality and stratification, examines social inequalities in historical perspective, reviews major theories about social inequalities, and considers key social developments in contemporary societies in the area of social inequalities.
2110 Economy and Society as its principle task, explores different links that exist between economy and society. Emphasis will be put on embeddedness of economic processes in a broader social context. Several approaches to the study of the embeddedness will be discussed: economic sociology, institutional economics, law and economics, and others. Do we really live in a network society, where the most important thing is to 'get connected'? How important is it to trust people in everyday life and to what extent? What role do power and coercion play in our everyday lives? The course will provide guidelines for finding tentative answers to these questions.
2120 Technology and Society is an examination of the role of technology in society and society's role in shaping technology. Topics may include the emergence of modern technological society, the impact of new technologies on social organization and culture, and the institutionalization of science and the production of scientific knowledge. The course also explores the ideological functions of science and technology.
2210 Communication and Culture (same as the former Sociology/ Anthropology 2210 and the former Anthropology 2210) is an examination of verbal and non-verbal systems of communication, and the influence of
language on human cognition.
CR: the former Sociology/Anthropology 2210, the former Anthropology 2210
UL: not applicable towards the Major or Minor in Anthropology
2230 Newfoundland Society and Culture (same as Folklore 2230, the former Sociology/Anthropology 2230, and the former Anthropology 2230) focuses on the social and cultural aspects of contemporary island Newfoundland.
CR: Folklore 2230, the former Sociology/Anthropology 2230, the former Anthropology 2230
UL: not applicable towards the Major or Minor in Anthropology
2240 Canadian Society and Culture (same as the former Sociology/ Anthropology 2240 and the former Anthropology 2240) is a descriptive and analytic approach to the development of Canadian society and culture.
CR: the former Sociology/Anthropology 2240, the former Anthropology 2240
UL: not applicable towards the Major or Minor in Anthropology
2250 Global Social Problems is a sociological analysis of contemporary world issues and global social problems. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
2270 Families (same as the former Sociology/Anthropology 2270 and the former Anthropology 2270) is a comparative and historical study of the family, and the range of variation in its processes and structure.
CR: the former Sociology/Anthropology 2270, the former Anthropology 2270

2290 Animals and Society introduces students to contemporary sociological approaches to the study of the relationship between human and non-human animals.
$\mathbf{2 3 0 0}$ Criminological Inquiry (same as Police Studies 2300) introduces students to sociological and research models for understanding the phenomenon of "crime. As a background for developing theory, this course familiarizes students with the challenges associated with defining and researching "crime". Along with a critical examination of the different theories and methods in criminology, students consider the implications for policy.
CO: SOCI 1000
CR: Police Studies 2300
3015 Science, Technology, and Society (same as Geography 3015) explores the relationships among science, technology, and society (STS). It is premised on the idea that science and technology affect our social, cultural, economic, and political lives. Equally, scientific research and technology development are shaped by their social, cultural, economic, and political contexts. This course draws upon the fields of anthropology, sociology, geography, history, and cultural studies, as STS is an interdisciplinary field.
CR: Geography 3015
3020 Introduction to Social Network Analysis considers the idea that who you know matters, and shows how the structure of networks relates to everyday life. Students will learn how connections impact outcomes in areas such as health, employment, business, and critically examine how forms of social inequality like gender, ethnicity and class influence who we get to know. Students will be introduced to network analysis through the collection and analysis of their own networks.

3030 Political Sociology is an introduction to the sociological foundations of political life. Topics to be examined include voting behaviour, comparative power systems, ideologies, mass movements, parties, voluntary associations, and bureaucracies. Attention is given to the concepts of class, status, command, power, authority, and legitimacy.
CR: the former Political Science 3030
PR: SOCI 1000 or the former 2000
3040 Introduction to the Methods of Sociological Research provides familiarization with the processes and reasoning sociologists use for posing and answering sociologically grounded questions. Both qualitative and quantitative research design and analysis will be explored. We take you 'behind the scenes' of the research process to provide foundational research skills, familiarity with interpreting and gathering numerical data, and a stronger capacity for students to critically evaluate the research-based writing in sociology. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/hss/qr.

CO: SOCI 3041
PR: SOCI 1000 or the former 2000
3041 Theory and Practice of Sociological Research develops and elaborates upon work introduced in SOCI 3040. Students will more deeply explore the theories of knowledge that underpin social research and further hone their abilities to assess different forms of sociological work and to craft research questions. This course includes lectures, discussion, and introductory hands-on experience with both qualitative and quantitative research and analysis. Instruction takes place in a classroom equipped with the computer hardware and relevant software. All sections of this course follow Quantitative Reasoning Course Guidelines available at www.mun.ca/
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hss/qr.
CO: SOCI 3040
PR: SOCI 1000 or the former 2000
3120 Social Psychology examines sociological perspectives on social psychology: the physiological and psychological basis of sign and symbol use, the context and emergence of self, identity, role, encounters, social relationships, altercasting.

3130 Sociology of Gambling provides a critical overview of the major social and cultural aspects of modern gambling in terms of leisure, work and economic development, social inequality, health and illness, deviance and crime, and policy. Special attention is directed at the promotion of modern gambling by the state (lotteries, casinos, video lottery terminals, slot machines, and horse racing).

3140 Social Movements (same as the former Sociology/Anthropology 3140 and the former Anthropology 3140) examines the major social movements that have driven social changes related to gender equality, social justice, human rights, and the environment. The course asks why people become involved in social movements, and what factors contribute to movement success. The course also examines social movements' use of mass media and new media technologies as tools for reaching the public and provoking social and cultural transformation.
CR: Sociology/Anthropology 3140, the former Anthropology 3140
UL: not applicable towards the Major or Minor in Anthropology
3150 Classical Social Theory is an introduction to the work of major 19th and early 20th-century social theorists including Marx, Durkheim, and Weber.
PR: SOCI 1000 or the former 2000
3160 Contemporary Social Theory is an exploration of selected topics from issues in contemporary social theory, including theories of feminism, the state, the environment, culture, organization, and communication.
PR: SOCI 1000 or the former 2000
3180 Ethnic Relations in Canada examines the nature of ethnocultural group status in society and various examples of ethnocultural groups in past and present societies, reviews theoretical perspectives on racial and ethnic inequality, and explores various aspects of the relationship between ethni groups in Canada.
CR: the former SOCI 3304
PR: SOCI 1000 or the former 2000
3200 Population is an introduction to demography, the scientific study of human populations, their size and composition, and the processes by which they change over time: nuptially, fertility, mortality, and migration. Includes analyses of past and present Newfoundland and Labrador populations. PR: SOCI 1000 or the former 2000

3220 Work and Society (same as the former Sociology/Anthropology 3220 and the former Anthropology 3220) is an historical and comparative perspective on the cultural and social organization of work, its determinants and human implications.
CR: the former Sociology/Anthropology 3220, the former Anthropology 3220
PR: SOCI 1000 or the former 2000
UL: not applicable towards the Major or Minor in Anthropology
3260 International Development (same as Anthropology 3260) is an examination of theories of development including a critical analysis of international case studies. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
CR: Anthropology 3260, the former Sociology/Anthropology 3260
3290 Deviance examines major sociological theories and methodological techniques central to the study of deviance and crime. The distribution, attributes and explanations of a variety of forms of deviance are examined, which may include violence, sexual deviance, delinquency, addiction, mental disorder, theft, organized crime, political deviance and corporate deviance.
PR: SOCI 1000 or the former 2000
3300-3313 (Excluding 3306, 3311) Sociological Specialties will have a topic of current interest and importance, announced by the Department for each term, such as racial and ethnic relations, sociology of religion, health, art, language, conflict, stratification, knowledge, selected social problems.
3306 Young Offenders and Youth Justice (same as Police Studies 3306) provides an introduction to the youth justice system. The course examines the evolution and impact of youth justice philosophy and legislation in Canada and the experiences of youth at various stages within the system. Topics may include: youth crime measurement, the social profile of young offenders, information sources about youth crime, theories of youth delinquency, and issues affecting young people (e.g. homelessness, substance use, mental illness, gang involvement).
CR: Police Studies 3306
PR: Police Studies 1000 or SOCI 1000
3311 Sociology of Disability examines the social construction of disability,
and explores the intersection of disability, disability studies, and disability activism with major areas of sociological focus that often fail to address disability (e.g. race, gender, work, sexuality, identity, globalization and knowledge production). By critically unpacking concepts of 'accommodation', 'inclusivity' and 'accessibility' this course explores how constructions and discourses of disability shape our social world and ways of knowing.
3317 Oil and Society (same as the former Sociology/Anthropology 3317 and the former Anthropology 3317) is an examination of the sociology of the Western oil industry and of the social and cultural implications of oil activities for those regions in which they occur. Particular attention will be paid to North Atlantic societies: Scotland. Norway, and Atlantic Canada.
CR: the former Sociology/Anthropology 3317, the former Anthropology 3317
PR: SOCI 1000 or the former 2000
UL: not applicable towards the Major or Minor in Anthropology
3318 Culture and Aging (same as the former Sociology/Anthropology 3318 and the former Anthropology 3318) is an Introduction to the study of aging from a social and cultural perspective. Distinctions between the biological and social elements of the aging process will be examined. The overview of social and cultural gerontology Includes social, economic and political influences on later life, as well as the culture-based needs and aspirations of the aged.
CR: the former Sociology/Anthropology 3318, the former Anthropology 3318
PR: SOCI 1000 or the former 2000
UL: not applicable towards the Major or Minor in Anthropology
3320 Terrorism and Society (same as the former Sociology/Anthropology 3320 and the former Anthropology 3320) is an examination of the recourse to violence as a recurring phenomenon in social and political movements. Consideration will be given to problems of classifying and explaining various forms of "terrorism", and to discussing their consequences for society.
CR: the former Sociology/Anthropology 3320, the former Anthropology
3320
PR: SOCI 1000 or the former 2000
UL: not applicable towards the Major or Minor in Anthropology
3395 Criminal Justice (same as Police Studies 3395) provides an introduction to the sociological perspectives on our system of formal social control (police, courts, corrections). Special attention is directed at how social structure and social inequality (class, ethnicity and race, gender) influence criminal justice decisions. Topics discussed include public opinion on crime and criminal justice, offenders and victims in the system, consensus and conflict in the creation of criminal law, finding a delicate balance between police powers for crime control and democratic rights, types of sentencing options and rationales, and the dual and conflicting goals of prisons and alternatives to incarceration.
CR: Police Studies 3395
PR: SOCI 1000 or the former 2000, and SOCI 3290 or Police Studies 3000
3400 Sociology of Youth explores the social construction of youth and reviews major theoretical approaches to the study of youth within Western Society. The course examines youth in relation to culture and identity, place and space, social inequalities, and social institutions.
3410 Sociology of Physical Activity \& Sport (same as Human Kinetics and Recreation 3410) is an analysis of functions of physical activity and sport in Canadian and North American society. Physical activity and sport will be viewed through social organization, social processes, social problems, socialization and stratification, and violence.
CR: Human Kinetics and Recreation 3410
PR: SOCI 1000 or the former 2000
3420 Sociology of Gender provides a comprehensive introduction to the major themes, theories and research questions addressed by sociologists studying 'gender'. The economic, social, cultural and political aspects of gender formations, in comparative Canadian and transnational contexts, will be examined.

3630 New Media Methods in Social Research (same as Anthropology 3630) will explore non-print means for recording social behavior and will utilize various forms of the media as a descriptive and an analytic tool.
CR: Anthropology 3630, the former Sociology/Anthropology 3630
PR: SOCI 1000 or the former 2000
3710 Post-Soviet Transformations will explore problems of development in post-Soviet countries, examining them in a broader context of modernization. 'Catch-up' modernization gives rise to a set of problems related to institutional importation, e.g., a gap between formal and informal institutions. These problems exist in Russia as well as in a number of other less-developed countries.
PR: SOCI 1000 or the former 2000
3731 Sociology of Culture is a comparative examination of major contemporary sociological texts on the relationship between culture, broadly understood as symbolic systems, and social structure

4040 Investigative Methods in Sociological Research provides more
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).
advanced undergraduate-level study and practice in a variety of qualitative and quantitative sociological research methods. It will cover stages from conceptualization to empirical studies. The seminar format may include lectures, discussion and a range of research methods exercises.
PR: SOCI 3040, 3041
4071 Social and Cultural Aspects of Health and Illness (same as Anthropology 4071) will cover topics which may include: cultural concepts of illness and health; theories of disease causation; relationships between social life and illness patterns; symbiotic use of illness; variations in philosophies of treatment and in practitioner/patient relationships; the social organization of medicine.
CR: Anthropology 4071, the former Sociology/Anthropology 4071
PR: SOCI 3040, 3150
4074 Ritual and Ceremony (same as the former Sociology/Anthropology 4074 and the former Anthropology 4074) is about ritual and ceremony, as both analytic and descriptive concepts, in both industrial states and subsistence-oriented societies. Topics examined could include: the universality of ritual and ceremony; essential differences between ritual and ceremony; their relative importance in non-industrialised and industrialised societies; the place of symbolism in ritual and ceremony; and the relationship between ritual, ceremony, religion and the sacred.
CR: the former Sociology/Anthropology 4074, the former Anthropology 4074
PR: SOCI 3040, 3150
UL: not applicable towards the Major or Minor in Anthropology
4077 Advanced Studies in Terror and Society - inactive course.
4080 Advanced Topics in Criminology covers an array of theoretical and empirical developments in sociology and criminology that cross boundaries within the diverse systems of criminal justice, the community and society more broadly. Special emphases will be placed on the experiences of those in the criminal justice system - as victims, offenders, and professionals - and theories of desistance, as well as the intersection of gender with race, ethnicity and class.
PR: 6 credit hours in Sociology. Enrollment priority will be given to students who have declared a Sociology Major and/or the Criminology certificate program.
4091 Oil and Development (same as the former Sociology/Anthropology 4091 and the former Anthropology 4091) is an advanced seminar which will consider some selected topics dealing with the petroleum industry and its implications for economic development and social change. A comparative approach will be taken, using material from developed, underdeveloped and intermediate regions of the world.
CR: the former Sociology/Anthropology 4091, the former Anthropology 4091
PR: SOCI 3040, 3150
UL: not applicable towards the Major or Minor in Anthropology
4092 Gender and Social Theory (same as the former Sociology/ Anthropology 4092 and the former Anthropology 4092) is a seminar which examines assumptions about what constitutes 'social theory', the history of social thought as it applies to issues of gender, and the debates surrounding the intersection of gender and social theory. The goal is to understand more about ways in which social theory has illuminated relations between gendered categories, the social world and its diverse inhabitants.
CR: the former Sociology/Anthropology 4092, the former Anthropology 4092
PR: SOCI 3040, 3150, 3420 or permission of the instructor
UL: not applicable towards the Major or Minor in Anthropology
4093 Development Sociology is a seminar course focusing on theoretical and empirical explanations of development (e.g. international development, foreign aid, and trade). The course provides students with an understanding of how the theories, actors, and ongoing challenges of development shape societies globally. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.
PR: 6 credit hours at the 3000-level in Sociology or in any other discipline in the Humanities or Social Sciences
4094 Unemployment (and Underemployment) is a seminar which examines the origins and impacts of unemployment and underemployment in Newfoundland and Labrador, Canada and globally. It examines the core concepts in the sociology of unemployment and underemployment and then moves to consider the consequences for societies, communities and individuals.
PR: SOCI 3040, 3150
4095-4098 (Excluding 4096) Special Areas in Sociology will have the content announced when offered.
PR: SOCI 3040, 3150
4099 Victimology introduces students to the sociological study of the victims of crime. Along with examining the history of victimology and the current official data on victims, the course considers the individual and social consequences of victimization and the victims' responses to those consequences. This includes a critical examination of the role and impact of
various official agencies and the psychiatric profession in processing victims. PR: SOCI 3040, 3150
4100 Internship is a part-time, one-semester internship course, and is normally an unpaid supervised field placement for academically strong sociology majors. The goal is to help give students basic skills required for employment in non-profit organizations in the social services and arts management.
UL: six hours per week of worksite activities over a period of eight weeks as well as classroom instruction during part of the term
4100-4109 (Excluding 4100, 4101, 4104 and 4107) Special Topics in Institutional Analysis is advanced analysis from a sociological perspective of issues pertaining to specific social institutions.
PR: SOCI 3040, 3150
4101 Modern Western State provides a selective overview of some of the sociological debates surrounding the modern Western state. Topics may include the history and development of the modern Western state, sociological theories of the state; the state and the economy; and the state and globalization. Through this course, students will learn how the distribution of power in societies influences the character of the state and government decision making.
PR: SOCI 3040, 3150
4104 Environmental Sociology examines the social forces that drive environmental degradation and responses to environmental issues. The course explores how environmental issues, such as climate change, fisheries collapse, or deforestation, are intertwined with systems of social power and inequality. Through this course, students will learn how a sociological perspective helps address the causes and potential solutions for environmental problems and conflicts.
CO: SOCI 3040, SOCI 3150 and 3 additional credit hours in Sociology courses at the 3000 level, or permission of the course instructor, or completion of 18 credit hours in the Diploma in Environmental Humanities
PR: SOCI 3040, SOC1 3150 and 3 additional credit hours in Sociology courses at the 3000 level, or permission of the course instructor, or completion of 18 credit hours in the Diploma in Environmental Humanities
4107 Feminist Technologies (same as Geography 4107) investigates the effects of technology in feminist social movements and technologies that exemplify feminist values and ideologies, particularly as they pertain to the Earth Topics could include: ecofeminism and technology; assessing, designing, and building technologies from a feminist perspective; the gender politics of social-technological systems; information technologies in science; feminist geography; biotechnology and ecology; development in architecture and design. The course combines seminar discussions of reading with hands-on activities.
CR: Geography 4107
PR: 9 credit hours in any combination of Sociology, Gender Studies, Geography, Communication Studies 2000, Communication Studies 2001
4200-4220 (Excluding 4201, 4203, 4204, 4208, 4212 and 4213) Special Topics in Sociology will have topics to be studied announced by the Department.
PR: SOCI 3040, 3150
4201 The Sociology of Gender, Health and Risk is a seminar course that critically examines how gender structures risk factors and health outcomes and shapes how we experience and understand bodies and minds in relation to health and risk. Topics may include transgender and transsexual health, masculinities and femininities, the body, mental health, leisure and sport, the health care system, and occupational health and safety.
PR: SOCI 3040, 3150
4203 Sociology of Time is a seminar class exploring the social construction of time. Questions addressed include: What do we make of the past, present, and future? What are the meanings of time-reckoning systems? What role do these systems serve? The course will also expose students to how different sociological lenses have been applied to the sociology of time through key studies in the field.
PR: SOCI 3040, 3150
4205 Indigenous Peoples in the City examines the migration and involvement of Indigenous Peoples to urban centres. Students will critically consider nationhood, affiliation, ethnicity, gender, and class as these structures relate co Indigenous Peoples, urban living, identity and culture. Students will further decolonize their understanding of Indigenous Peoples and participation in urban society.

4208 Gender, Poverty and Homelessness is a critical sociology seminar using an intersectional approach to examine issues confronting the wide diversity of people living in poverty in the contemporary Canadian welfare state. Topics include pathways to poverty, health and quality of life, impact of gender and other social locations on poverty, civil society responses, social policy and actions, and the provision of financial, human, and social program resources in Canada and Newfoundland and Labrador.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

4210 The Sociology of Child Sexual Abuse is an advanced seminar that explores how sexual violence toward youth is constructed as a social problem. Topics include: theoretical and methodological explanations of child sexual abuse (including methodological issues on collecting data on youth, cross-cultural research), relationships between adult sexual violence and child sexual abuse, sexual perpetrators and pedophiles, the place of children in contemporary society, the experiences of child victims and professional responses to child sexual abuse.
PR: SOCI 3040, 3150
4212 Sociology of Policing (same as Police Studies 4212) is a seminar course exploring the role policing plays in society, the social, economic, and political factors that shape policing, and the policies to improve policing. Topics may include popular views of the police, the use of force in arrest and public protest, investigative myths and effectiveness, community policing, police socialization, policing problems such as family violence, policy misconduct, gender and diversity in police services and the expansion of private policing.
CR: Police Studies 4212
PR: SOCI 1000 or the former SOCI 2000 or Police Studies 1000 or the former Police Studies 2000 and 6 credit hours at the 3000 level in Sociology or Police Studies

4213 Sociology of Sexuality explores the socially constructed nature of sexuality, and examines how concepts of sexuality are used in the current North American context as well as across different times and cultures. The course explores sex and sexuality in connection to community and identity, social problems, social control, and political resistance.
PR: SOCI 3040, 3150
4230 Gender and Development is a seminar course focusing on theoretical and empirical explanations of how global development processes affect gender inequality and relations between men and women. The course provides students an understanding of how the theories, actors, and ongoing challenges of development interact with and work to shape socially constructed gender relations in a global perspective. Special attention is paid to how globalization influences gender in the international development context. All sections of this course follow International Studies guidelines available at www.mun.ca/hss/IS.

CR: the former SOCI 4204
PR: SOCI 3040, 3150
4240 Development Issues and Policies in Newfoundland and Labrador is a senior-level seminar course that focuses on the interaction between sociological research and theory on the one hand and government policymaking and implementation on the other with respect to social and economic development in Newfoundland and Labrador.
PR: SOCI 3040, 3150
4995 Honours Essay is a part of the honours program.

### 15.29.1 Police Studies

A tentative list of upcoming Police Studies course offerings can be found at www.mun.ca/hss/courses.php.
Police Studies courses are designated by PLST.
1000 An Introduction to Policing in Canada (same as the former PLST 2000) will introduce students to different theories and models of policing as a profession and area of research. It will examine the organization of police services, their mandate and operation and provide an overview of the history and development of policing in Canada. Examples from Newfoundland and Labrador will be used where appropriate, and the various roles and responsibilities of the police in society will be discussed. Other topics of study include police decision making, exercise of powers, use of discretion, recruitment and training, the professional role, organizational and operational stress and policing in a diverse society.
CR: the former PLST 2000
2200 Introduction to Corrections introduces students to the Correctional Systems in Canada and their role in Canadian Criminal Justice. Topics covered in this course include: the evolution of punishment and corrections in Canada, the purpose of prison, the classification of federal prisoners, the prisoner subculture or 'inmate' code, violence inside prisons, and community corrections after full custody incarceration.

2300 Criminological Inquiry (same as Sociology 2300) introduces students to sociological models and research methods for understanding the phenomenon of "crime". As a background for developing theory, this course familiarizes students with the challenges associated with defining and researching "crime". Along with a critical examination of the different theories and methods in criminology, students consider the implications for policy.
CO: Sociology 1000 or the former Sociology 2000
CR: Sociology 2300
3000 Crime Victims and Policing will provide an opportunity to explore contemporary victim issues, in particular, as they relate to enhancing police response and sensitivity to the needs of victims. The course will explore different types of victimization, encourage critical analysis and
understanding of the impact of the CJS on victims and the role of the victim in bringing about progressive and positive changes in the CJS. It will consider recent legislative developments, programs, services and emerging issues and discuss how victim engagement can promote public confidence in the administration of justice.
PR: PLST 1000 or the former PLST 2000
3100 Gender, Crime and Criminal Justice examines the gendered aspects of criminal offending, victimization, criminal justice responses (police, courts, corrections), and workers in the criminal justice system.
PR: PLST 1000 or the former PLST 2000
3200 Internship - inactive course.
3306 Young Offenders and Youth Justice (same as Sociology 3306) provides an introduction to the youth justice system. The course examines the evolution and impact of youth justice philosophy and legislation in Canada and the experiences of youth at various stages within the system. Topics may include: youth crime measurement, the social profile of young offenders, information sources about youth crime, theories of youth delinquency, and issues affecting young people (e.g. homelessness, substance use, mental illness, gang involvement).
CR: PLST 1000 or Sociology 1000
3395 Criminal Justice (same as Sociology 3395) provides an introduction to the sociological perspectives on our system of formal social control (police, courts, corrections). Special attention is directed at how social structure and social inequality (class, ethnicity and race, gender) influence criminal justice decisions. Topics discussed include public opinion on crime and criminal justice, offenders and victims in the system, consensus and conflict in the creation of criminal law, finding a delicate balance between police powers for crime control and democratic rights, types of sentencing options and rationales, and the dual and conflicting goals of prisons and alternatives to incarceration.
CR: Sociology 3395
PR: Sociology 1000 or the former Sociology 2000, and Sociology 3290 or PLST 3000
3500 Investigative Interviewing will introduce students to investigative interviewing. It covers a range of topics that will help develop and/or improve the interviewing skills of those working in various disciplines where professional interviewing skills are essential.
PR: PLST 1000 or the former PLST 2000
3600-3610 Special Topics will cover special topics related to policing and will be announced by the Program Coordinator.
4000 Advanced Issues in Policing provides discussion of aspects of policing, including powers of search and seizure, arrest and release, interviewing and interrogation, in light of the Canadian Charter of Rights and Freedoms. Police misconduct, abuse of power, the police role in false confessions and wrongful convictions, and techniques that contribute to these will also be examined. Topics include knowledge required for different types of offences (e.g. drugs, cybercrime, sex work), monitoring special events, and policing diverse communities.
PR:PLST 1000 or the former PLST 2000, and 6 credit hours at the 3000level in Police Studies
4001 Police Decision Making and Ethics examines the ethical challenges, dilemmas and issues involved in different aspects of policing both at the individual and organizational level. Different philosophical theories are reviewed along with the research literature on police deviance and crime. Problems of definition and measurement are considered along with the policy implications of research for achieving higher and more consistent standards of police ethics.
PR: PLST 1000 or the former PLST 2000, and 6 credit hours at the 3000level in Sociology or Police Studies

4100-4110 Special Topics will cover special topics related to policing and will be announced by the Program Coordinator.
PR: PLST 1000 or the former PLST 2000, and 3 credit hours at the 3000level in Police Studies
4212 Sociology of Policing (same as Sociology 4212) is a seminar course exploring the role policing plays in society, the social, economic, and political factors that shape policing, and the policies to improve policing. Topics may include popular views of the police, the use of force in arrest and public protest, investigative myths and effectiveness, community policing, police socialization, policing problems such as family violence, policy misconduct, gender and diversity in police services and the expansion of private policing. CR: Sociology 4212
PR: Sociology 1000 or the former Sociology 2000 or PLST 1000 or the
former PLST 2000, and 6 credit hours at the 3000-level in Sociology or Police Studies

### 15.30 Spanish

A tentative list of upcoming Spanish course offerings can be found at www.mun.ca/hss/courses.php.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

Spanish courses are designated by SPAN.
1000 Introductory Spanish I is a course without prerequisites for students with no prior knowledge of the language. The fundamentals of Spanish are introduced through communicative and task-based activities that develop understanding, speaking, reading, and writing. Aspects of Spanish culture are also presented. Group or individual practice in the language laboratory and conversation classes are also part of this course. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum
1001 Introductory Spanish II Is a continuation of Spanish 1000 with practice in the four language skills: understanding, speaking, reading, and writing, and further exploration of Spanish culture through interactive classroom instruction and more laboratory and conversation practice.
PR: SPAN 1000 or permission from the Head of the Department
2000 Intermediate Spanish I is a continuation of the basic grammar, reading, and oral Spanish completed in the elementary program. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum PR: SPAN 1001

2001 Intermediate Spanish II is a continuation of Intermediate Spanish I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
OR: students may be required to attend a 50 minute weekly practicum PR: SPAN 2000

2005 Business and Culture I is an intermediate course that focuses on communication skills in Spanish (listening, speaking, reading and writing) as well as on the acquisition of intercultural competence to use Spanish in business-oriented situations. This course is open to native or near-native speakers.
CO: SPAN 2000
OR: students may be required to attend a 50 minute weekly practicum
PR: SPAN 1001, or equivalent, or permission from the Head of the Department

2006 Business and Culture II is a continuation of SPAN 2005. It focuses on communication skills in Spanish (listening, speaking, reading and writing) as well as on the acquisition of intercultural competence to use Spanish in business-oriented situations at a more advanced level. This course is open to native or near-native speakers.
CO: SPAN 1001
OR: students may be required to attend a 50 minute weekly practicum
PR: SPAN 2000 and 2005, or equivalent, or permission from the Head of the Department
2010 Intermediate Spanish Language Studies will emphasize the development of aural comprehension and oral expression in Spanish in an intensive immersion setting. The course will also include work on written expression and comprehension.
OR: students may be required to attend a 50 minute weekly practicum
PR: SPAN 1001 or permission of the Head of the Department. Offered only in the context of a study-abroad program in a Spanish speaking country.

2020 Intermediate Hispanic Cultural and Literary Studies will focus on Hispanic literary and cultural studies at the intermediate level and in an intensive immersion setting.
OR: students may be required to attend a 50 minute weekly practicum
PR: SPAN 1001 or permission of the Head of the Department. Offered only in the context of a study-abroad program in a Spanish speaking country.
3000 Spanish Literature of the 18th and 19th Century I - inactive course.
3010 Advanced Spanish Language Studies - inactive course.
3020 Advanced Hispanic Cultural and Literary Studies - inactive course.
3101 Spanish Literature of the Golden Age is a general introduction to the historical and cultural background and development of sixteenth and seventeenth century Spanish prose literature through study of Lazarillo de
Tormes, Don Quijote and El Buscón. Special emphasis is given to the picaresque novel and on the originality of Cervantes and the creation of the first truly "modern" novel.
PR: SPAN 2001
3200 Spanish Literature 20th Century is a general survey of Spanish literary works of the twentieth century, with a detailed study of representative authors.

PR: SPAN 2001
3300 Hispanic Cinema and Culture is a study of selected (subtitled) films by representative film-makers from the Hispanic world. Emphasis will be placed on the cultural and social issues explored in the films and the historical context in which they emerge.
PR: SPAN 2001 or equivalent, or permission of the Head of the Department.
UL: not acceptable towards the second language requirement for the completion of the Bachelor of Arts degree
3400 Spanish Civilization - inactive course.
3401 Latin-American Culture and Civilization explores Latin-American culture and civilization from pre-Columbian times to the present. Particular attention will be paid to issues of colonization, identity and to the background of the various independence and revolutionary movements in the region.
PR: SPAN 2001 or equivalent, or permission of the Head of the Department
3500 Latin-American Literature I-inactive course.
3501 Latin-American Literature II I-inactive course.
3502 Latin-American Short Story is a survey course on general characteristics and history of the short story. Emphasis will be placed on close reading of stories from different geographical areas, such as Mexico, Cuba, Argentina, Colombia, and the U.S.
PR: SPAN 2001 or equivalent, or permission of the Head of the Department
3600 Latin American Literature 20th Century I is a study of representative works of Latin-American literature of the twentieth century.
PR: SPAN 2001
3601 Latin-American Literature 20th Century II is a study of representative works of Spanish-American literature of the twentieth century. PR:SPAN 2001

3700 Advanced Spanish / covers oral Spanish, composition and reading of contemporary literary materials; phonetics. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: SPAN 2001
3701 Advanced Spanish II is a continuation of Advanced Spanish I. All sections of this course follow the Language Study Course Guidelines available at www.mun.ca/hss/ls.
PR: SPAN 3700
3800-3809 Special Topics in Spanish-language Literature will have the particulars available on the Departmental website.
CO: SPAN 2001 or equivalent but may vary with each new course
CR: currently not applicable but may vary with each new course
PR: SPAN 2001 or equivalent but may vary with each new course
3850-3859 Special Topics in Spanish-language Culture will have the particulars available on the Departmental website.
CO: SPAN 2001 or equivalent but may vary with each new course
CR: currently not applicable but may vary with each new course
PR: SPAN 2001 or equivalent but may vary with each new course
4000 Medieval Spanish Literature - inactive course.
4200 Nineteenth Century Spanish Novel - inactive course.
4201 Modern Spanish Novel - inactive course.
4500 Twentieth Century Latin-American Novel - inactive course.
4501 Modernism in Latin-American Literature - inactive course.
4502 Modern Latin-American Drama is a study of the characteristics of theatre, its literary and performative aspects, and its relationship to history, culture and society.
CO: Spanish 2001 and any 3000-level Spanish course or equivalent, or permission of the Head of the Department

4503 Contemporary Latin-American Poetry - inactive course.
4700 Oral and Written Spanish Composition - inactive course.
4800 Directed Reading Course in Spanish - inactive course.
6900 Reading in Spanish is a graduate service course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).


## FACULTY OF MEDICINE

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Dean
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Up-to-date personnel listings are available at www.med.mun.ca/Medicine/FacultyAffairs/FacultyAZ.aspx.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Background

The Faculty of Medicine of Memorial University of Newfoundland is one of 17 Canadian medical schools and was one of the four schools suggested by the Hall Royal Commission on Canadian Health Services in its 1964 report.
A series of meetings was begun in 1963 between representatives of Memorial University of Newfoundland, the Newfoundland Medical Association, and the Department of Health of the Government of Newfoundland and Labrador. Following the Hall Commission's recommendation and on the basis of positive advice from Dr. J. Wendell MacLeod, Executive Secretary of the Association of Canadian Medical Colleges, and Dr. Chester B. Stewart, Dean of Medicine at Dalhousie University, Halifax, Nova Scotia, Memorial University of Newfoundland established a Commission in 1965 to undertake a feasibility study. The late Dr. J.A. MacFarlane, formerly Dean of Medicine at the University of Toronto, and a member of the Hall Royal Commission served as chairman. The MacFarlane Commission's recommendation that a Medical School be established at Memorial University of Newfoundland was confirmed independently by a Royal Commission on Health Services for Newfoundland and Labrador. The chairman of this latter Commission, Lord Brain, an eminent British medical educator, and his advisors, reported that the location of a medical school in the Province was a necessary step in the provision of adequate medical services for Newfoundland.
Dr. Ian Rusted, a local physician who had been involved in the early negotiations and had taken the initiative in introducing continuing medical education for doctors in the Province, was appointed Dean of Medicine in 1967. Under his leadership, faculty members were recruited, the undergraduate program was initiated and the first medical students were admitted in 1969. The existing programs of postgraduate training and continuing medical education were strengthened and the spectrum of medical education was subsequently completed in 1971 with the initiation of a program of graduate studies leading to the degrees of M.Sc. and Ph.D.
The undergraduate curriculum was designed to foster integrated learning ând to permit contact with patients early in the student's training. To facilitate this integrated approach the administration of the school was set up as a non-departmental system based on three Divisions: Community Health, BioMedical Sciences and Clinical Sciences.
Initially the Faculty of Medicine was housed in temporary buildings. With joint funding by the Federal and Provincial Governments, a Health Sciences Centre (HSC) was constructed on the North Campus of the University and was officially opened in 1978. This new building became home to the Faculty of Medicine General Hospital and the School of Nursing. Over time the building was expanded, and now it also houses the School of Pharmacy, the Janeway Children's Health and Rehabilitation Centre, the Dr. H. Bliss Murphy Cancer Centre and the Agnes Cowan Hostel. The Health Sciences Centre contains a comprehensive health sciences library, animal care and research facilities, plus an appropriate range of teaching facilities to accommodate large lectures and demonstrations, small group discussions and seminars, clinical skills and laboratory sessions. The structure of the Health Sciences Centre facilitates integration between basic scientists, clinicians and allied health workers in the hospital, the University and the community. Clinical research facilities are located adjacent to basic research units and some research laboratories provide services in clinical investigation. Services such as cafeteria and stores are common to the Faculty of Medicine and the Eastern Regional Health Authority. In July 2014, the administrative offices of the Faculty of Medicine moved into the new adjacent Medical Education Centre where classes began for students in September, 2014. The Craig L. Dobbin Research Centre on the third, fourth, and fifth floors of the building opened in May, 2015.

The General Hospital and Janeway Children's Health and Rehabilitation Centre are part of a network of teaching hospitals in St. John's, throughout Newfoundland and Labrador and other Atlantic provinces. The conventional use of major referral centres as teaching resources is complemented by the availability of regional and community hospitals to provide valuable clinical experience for undergraduate and postgraduate medical students.
In contrast to many other schools, the class size at the University's Medical School is small. This facilitates interaction between students and faculty, and has obvious advantages in clinical teaching. Normally 80 students are admitted annually to the first year of the undergraduate medical program.
Additional information regarding the Faculty of Medicine is available at www.med.mun.ca/medicine/home.aspx.

## Mission and Objectives of the Faculty of Medicine

Working in the spirit of partnership and respect, the Faculty of Medicine is committed to delivering integrated excellence in education, research and evidence informed care: meeting the unique health needs of our rural, remote and urban communities; and advocating for health, equity, Indigenous health and healthy populations.
The objectives of the Faculty of Medicine are consistent with the objectives of Memorial University of Newfoundland in developing and maintaining excellence in the quality of its academic standards and of research, establishing programs to meet the expanding needs of the Province and of providing the means to reach out to all the people.
The Faculty seeks to attain these objectives through an organizational structure which allows optimum interaction among the various disciplines within the Medical School and with other Faculties and Schools as appropriate.
The term 'Medical School' refers to the wider organizational structure of the Faculty of Medicine with various healthcare, institutions, community organizations and other academic units with the University.

The specific objectives are:

1. To teach medical students to be physicians; and to provide such learning experiences as will inspire all medical graduates of the school to be prepared to practice medicine at the highest standards, serving all individuals and societies in the pursuit of health.
2. To acknowledge the special geography of this Province by encouraging the education of physicians with exemplary skills for rural practice.
3. To educate and train graduate and diploma students in the health sciences.
4. To provide postgraduate educational experiences in medicine and the medical sciences such that the graduating Canadian physicians will pursue further studies within the school's postgraduate programs, leading to certification in family medicine or specialist subjects, especially in those areas where deficiency in numbers is currently recognized or anticipated.
5. To instill within students at all levels:
a. The wish and the capacity to further the practice and science of medicine through the creation of new knowledge for the improvement of the health of the world's peoples.
b. The wish and the capacity to improve their own professional practice through continuing self-assessment and scholarship.
c. An appreciation of their evolving roles as members of a team of professionals possessing complementary skills.
6. To attract faculty members who will together:
a. Act as a resource in providing undergraduate, graduate, postgraduate, and continuing medical education.
b. Contribute to the advancement of educational methods.
c. Practice the highest quality of primary, secondary, or tertiary care medicine.
d. Show leadership in promoting research into the health of the individual and the community, including the organization of health care delivery systems.
e. Facilitate and promote education and research appropriate to our mid North-Atlantic environment.
7. To provide educational experiences in the health sciences to students from other Schools or Faculties of Memorial University of Newfoundland and of other educational institutions.
8. To provide Continuing Medical Education experiences which will help physicians to maintain and enhance their competence in medical skills.
9. To provide a learning environment for undergraduate, graduate, and postgraduate students of medicine and the medical sciences who are citizens of other countries.
10. Actively to provide an Informational, Educational and Consultative resource for the whole community.

## 5 Affiliated Teaching Sites

1. Within St. John's: (hospitals under the Eastern Regional Health Authority)
2. Outside St. John's: (hospital/community settings)
3. New Brunswick and other jurisdictions: (hospital/community settings)

## 6 Description of Medical Training Program

The Faculty of Medicine offers a four-year undergraduate medical program, comprising a minimum of 189 credit hours, leading to the degree of Doctor of Medicine (M.D.).
The Diversity Statement for the Faculty of Medicine is available at www.med.mun.ca/medicine/home.aspx.
The program consists of four phases; Phase one covers normal health and development, Phase two covers acute reversible or modifiable health issues, Phase three covers chronic disease, and Phase four involves integration into practice. The first three Phases employ a variety of teaching and learning experiences, including self-directed learning, to learn about all aspects of health (physical, mental, social, and psychological), disruptions in health that can lead to frank disease, and all aspects of science, community health, ethics, and clinical skills related to identifying and describing disease and its diagnosis. During Phase 4, students take courses that will allow them to experience major disciplines in hospital and community settings throughout affiliated teaching sites in Newfoundland and Labrador and community and hospital settings in New Brunswick and other jurisdictions. They participate as members of the health care team, gaining the knowledge and experience necessary to assume the responsibilities associated with patient care.
Medical students are required to participate fully in medical education experiences which occur at various times and communities outside of the St. John's metropolitan area throughout the undergraduate medical education program.
Students in good academic standing are qualified to write Part I of the licensing examinations set by the Medical Council of Canada (MCC) at the appropriate time.

## 7 Continuing Professional Development

The Faculty of Medicine's Office of Professional and Educational Development (OPED) is a university-accredited provider of continuing professional development (CPD) for healthcare professionals and faculty as designated by the Committee on Accreditation of Continuing Medical Education (CACME). Such designation allows OPED to accredit Royal College of Physicians and Surgeons of Canada (RCPSC) and College of Family Physicians of Canada (CFPC) CPD programs, by following accreditation guidelines set forth by the two colleges. OPED offers a breadth of professional development and faculty development programming each year which addresses the needs of faculty and healthcare professionals who practice in both urban and rural communities across Newfoundland and Labrador, nationally and internationally. Programs are offered in a variety of formats, including: live/face-to-face; online/distance; discipline rounds; and educational assessment, retraining and traineeship experiences. OPED also offers professional development certificate programs in a variety of program areas that address the various competencies of the CanMEDS and CanMEDS-Family Medicine frameworks.

1. The Office of Professional and Educational Development (OPED) offers a variety of accredited continuing professional development (CPD) and faculty development programs in partnership with Faculty of Medicine Disciplines and Divisions, and other community partners. Participants interested in registering for OPED programs or further information on services are advised to consult the OPED website at www.med.mun.ca/opd, or contact the Office by email at pdmed@mun.ca, or by telephone at (709) 864-3358.
2. The Certificate in Medical Teaching is a ten-month course offered on-site and online that introduces participants to fundamental concepts, principles and theories of teaching and learning in medical education settings. Participants are required to complete a Medical Education Project and submit a final report to meet program requirements.
3. The Physician Management \& Leadership Program is a ten module accredited certificate program combining on-site and online
learning, and designed to prepare physicians (and other healthcare professionals working in medical administration) to become effective leaders and managers. The program has been developed collaboratively by the Office of Professional and Educational Development (OPED) and the Faculty of Business Administration (Gardiner Centre). Participants are required to complete a series of reflective assessment activities to meet program requirements.
4. The Certificate in Local and Global Health Equity is an accredited twelve module program introducing participants to key concepts surrounding health equity, relationship of health equity to local and global health, and the impact of health equity on the professional work of physicians and other health care providers. Participants may register for individual modules or complete all program modules to receive the Local and Global Health Equity certificate.

## 8 Postgraduate Medical Training

Postgraduate medical training is offered in residency programs leading to certification by either the College of Family Physicians of Canada (CFPC) or the Royal College of Physicians and Surgeons of Canada (RCPSC). These are full-time training programs comprised of hands-on practical training complemented by formal teaching and academic study. Residency programs are completed in a structured learning environment consisting of hospital and community based teaching units, supervised by faculty. Residents are required to participate fully in all medical education experiences that occur at various times and communities throughout their respective residency program.
The Postgraduate Medical Education (PGME) Committee oversees all aspects of the planning of residency programs and reports to the Dean of Medicine through the Associate Dean, PGME. The structure of residency programs is based on Canadian Excellence in Residency Accreditation (CanERA), which includes accreditation standards, processes and support tools. Residency programs are accredited through the Canadian Residency Accreditation Consortium (CanRAC), comprising the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, and the Collège des médecins du Québec.

### 8.1 Admission

Persons interested in a residency program apply through the Canadian Resident Matching Service (CaRMS). Further information is available from the CaRMS website at www.carms.ca/en/; by writing to, CaRMS, Suite 802, 151 Slater Street, Ottawa, Ontario K1P 5H3; or, by contacting the CaRMS office by telephone at (800) 291-3727.
A Resident who is currently in a residency program at another university and is interested in a residency program at Memorial University of Newfoundland's Faculty of Medicine is advised to consult the PGME website at www-med.mun.ca/pgme, or contact the Office by email at pgme@mun.ca, or by telephone at (709) 864-6331 for further information.

### 8.2 Residency Programs

The Faculty of Medicine offers programs leading to certification by the College of Family Physicians of Canada (CFPC) and programs leading to certification by the Royal College of Physicians and Surgeons of Canada (RCPSC).

### 8.2.1 Programs Leading to Certification by the College of Family Physicians of Canada (CFPC)

The Faculty of Medicine offers a residency program in Family Medicine and enhanced skills programs in Emergency Medicine, Care of the Elderly, and Care of Underserved Populations. Information regarding Programs Leading to Certification by the College of Family Physicians of Canada (CFPC) is available on the PGME website at www.med.mun.ca/pgme.

### 8.2.2 Programs Leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC)

The Faculty of Medicine offers residency programs in Anatomical Pathology, Anesthesia, Diagnostic Radiology, General Surgery, Internal Medicine, Neurology, Obstetrics/Gynecology, Orthopedic Surgery, Pediatrics, and Psychiatry. The Faculty of Medicine also offers postgraduate medical training in the subspecialty programs of Adult Nephrology, Child and Adolescent Psychiatry, Geriatric Psychiatry, General Internal Medicine, and Medical Oncology. Information regarding Programs Leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) is available on the PGME website at www.med.mun.ca/pgme.

### 8.3 Registration

1. Residents are registered each year as full-time students of Memorial University of Newfoundland.
2. Residents must be eligible for, and obtain, educational licensure from the College of Physicians and Surgeons of Newfoundland and Labrador (CPSNL). Further information is available at www.med.mun.ca/pgme or in-person at the Postgraduate Medical Education (PGME) Office.

### 8.4 Assessment

Each Resident is expected to complete the requirements of the residency program, as outlined by the discipline Residency Program Committee (RPC), for each year/stage of the program, and to meet the prescribed goals and objectives through the completion of rotations/clinical experiences/clinical blocks. A Resident is assessed throughout each rotation/clinical experience/clinical block. A Resident's performance and progress is determined by a subcommittee of the RPC, based on the review of written assessments and performance-based direct observations. The results of the Resident assessments indicate the competency level of the Resident for each goal and objective of the rotation/clinical experience/clinical block. The level of responsibility given to a Resident is based on regular assessment of abilities by faculty.
Assessment methods used in residency programs are discipline-dependent and in accordance with the appropriate accreditation standards.

### 8.5 Promotion

To successfully complete a residency program, a Resident, upon assessment, must be promoted through all the levels/stages of the program. A Resident must also successfully complete the Teaching Effectiveness Program. A Resident who does not meet the criteria for promotion will require appropriate modifications to their training, supervision, and assessment.

1. For Residents enrolled in programs leading to Certification by the College of Family Physicians of Canada (CFPC), detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy-Discipline of Family Medicine, available at www.med.mun.ca/pgme.
2. For Residents enrolled in programs leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) CBD Curriculum, detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy - Competence by Design, available at www.med.mun.ca/pgme.
3. For Residents enrolled in programs leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) Traditional Curriculum, detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy, available at www.med.mun.ca/pgme.

### 8.6 Other information

The Residency Program Committee (RPC) decides which Residents are eligible to sit the national examinations of the College of Family Physicians of Canada (CFPC) or the Royal College of Physicians and Surgeons of Canada (RCPSC).

### 8.7 Appeal

A Resident has the right of appeal in accordance with the following policies:

1. Resident Assessment, Promotion, Dismissal and Appeal Policy - Discipline of Family Medicine
2. Resident Assessment, Promotion, Dismissal and Appeal Policy - Competence by Design
3. Resident Assessment, Promotion, Dismissal and Appeal Policy

Details regarding the appeal process are available at www.med.mun.ca/pgme.

## 9 Graduate Studies

Interdisciplinary interaction and research among the divisions of BioMedical Sciences, Community Health and Humanities and the Clinical Disciplines is promoted.
Programs have been designed to attract students interested in a Graduate Diploma or a M.Sc., M.P.H., M.H.E., Ph.D. or M.D.-Ph.D. degree. Areas of strength include Applied Health Services Research, Cancer and Development, Cardiovascular and Renal Sciences, Clinical Epidemiology, Community Health, Human Genetics, Immunology and Infectious Diseases, Neurosciences, Nutrition/Dietetics, Population/Public Health, and Health Ethics. Details of the graduate programs are provided in the School of Graduate Studies section of this Calendar.

## 10 Regulations for the Degree of Doctor of Medicine

### 10.1 Admission to the Faculty of Medicine

1. All applications for entry to the program of studies leading to the Doctor of Medicine (M.D.) degree are dealt with by the Admissions Office of the Faculty of Medicine and must be submitted to that office on or before the closing date (normally September 15th). The exact date can be found under Important Dates on the Faculty of Medicine website. No application received after this date will be considered. An application processing fee of $\$ 75.00$ is required from all applicants.
2. Applications are reviewed after the closing date by the Admissions Committee of the Faculty of Medicine. This Committee has the delegated authority of the Faculty Council to admit or decline to admit students, following guidelines and procedures acceptable to that Council.
3. Admissions will normally be to the first year of medical studies. In exceptional circumstances, admission with advanced standing may be offered.
4. Entry to medical school is on the basis of competition for a fixed number of places. The Admissions Committee takes account of an applicant's academic background, performance on the Medical College Admissions Test (MCAT) and information on an applicant's personal characteristics and achievements as given by the applicant, by referees' reports and, in some cases, by personal interviews. Age by itself is not used as a basis for selection or rejection. Both age and the length of time away from full-time studies may be taken into consideration. The residency status of each applicant at the time of the closing date for application (normally September 15) will be determined by guidelines established by the Admissions Committee and approved by Faculty Council. The exact date can be found under Important Dates on the Faculty of Medicine website. For each candidate, the residency status determined at that time will apply throughout the admissions process and the period of undergraduate medical education. Priority is given to applicants who are bona fide residents of this province as well as applicants of Aboriginal descent. Further information is available at Aboriginal Applicants on the Faculty of Medicine website.
5. The Admissions Committee's decision to admit or decline to admit an applicant will be made on the basis of the competition for entry in the year of application and will be determined by the Committee's judgement of the likelihood of an applicant succeeding in the academic and professional studies leading to the award of the M.D. and in the eventual practice of medicine.
6. To be eligible for admission, an applicant shall have completed a bachelor's degree at a recognized university or university college before admission.
In exceptional circumstances an application may be considered from someone who does not expect to hold a bachelor's degree at the time of admission. Such an applicant will have completed at least 60 credit hours at a recognized university or university college before admission and be a student who has work-related or other experience acceptable to the Admissions Committee.
No application will be considered from a candidate who cannot produce evidence that the above requirements have been met or will have been met by the time of entry to the Medical School.
In addition, all applicants must write the MCAT prior to the application deadline. The MCAT should be written within the preceding five years of the date of application.
7. Applicants need to be aware of the policy related to Essential Skills and Abilities Required for the Study of Medicine. This policy outlines essential skills and abilities needed to succeed in the M.D. program and it includes technical standards for students in the program and information for students with disability. This information is available at Application Preparation on the Faculty of Medicine website.
8. Each applicant is responsible for ensuring that all the required information on the application form, e.g. transcripts, MCAT scores, referee's reports, is supplied to the Admissions Committee, and for providing any further information required by this Committee. An application is not considered complete until these documents have been received.
9. The Admissions Committee may request that a candidate attend an interview.
10. Notification of the Committee's decision will be made to candidates by letter signed by, or on behalf of, the Chair of the Admissions Committee. No other form of notification can be considered to be official.
11. The letter of acceptance will give the successful applicant fourteen (14) days in which to confirm that the applicant will accept the place offered. The signed intention to accept the offered place must be accompanied by a deposit of $\$ 200.00$ which will be credited towards tuition fees. The deposit will be forfeited if the applicant subsequently declines the place.
If no reply to the offer of a place is received within fourteen days, the offer by the Faculty of Medicine will be withdrawn on the appropriate date, and the applicant will be informed of this by letter.
12. In order to register, applicants who have been accepted as international students will be required to sign a document indicating that they will pay differential fees throughout the undergraduate medical program and that they will have the status of non-Canadians in the postgraduate matching process.
13. The Admissions Committee, at its discretion, may grant deferral of admission for one year to four successful applicants (normally not to exceed this number) in the first round of offers for any one admission cycle. An applicant must request a deferred entry at the time of responding to an offer of admission. The first round of offers are normally confirmed by mid-May and requests for deferral are considered by mid-June.
14. Unsuccessful applicants who wish to reapply for admission are required to submit the application forms relevant to the year of reapplication and will be required to enter the competition in that year. An unsuccessful applicant can meet with the Assistant Dean for Admissions or the Admissions Officer to discuss reapplying prior to the deadline for submission of a new application (normally September 15).
15. An unsuccessful applicant has the right to appeal against the decision of the Admissions Committee not to offer the applicant a place, if it is felt by the applicant that the decision was reached on grounds other than those specified in Clauses 1-4 above. The appeal should be made in writing within fourteen days of the notification of the decision and should be directed to the Dean of Medicine. The letter should state clearly and fully the grounds for the appeal. If the Dean of Medicine, in consultation with the Registrar, judges the grounds to be sufficient, the formal appeals mechanism will be initiated.

### 10.2 Registration in Newfoundland and Labrador and Other Approvals

All students are required to be on the Education Register of the College of Physicians and Surgeons of Newfoundland and Labrador (CPSNL).
The Faculty of Medicine does not require criminal record checks or other screening procedures as a condition of admission to its program.
Students, however, should be aware that such record checks or other screening procedures may be required by agencies used by the University for professional registration, clinical experiences or academic course assignments necessary for graduation. Such agencies may refuse to accept students on the basis of information contained in the record check or other screening procedure thus preventing the student from completing a practice experience or other requirement. As a result, such students may not be eligible for promotion or graduation. The student is responsible for having such procedures completed as required at the student's own expense. The screening procedures of any given agency may change from time to time and are beyond the control of the University.

### 10.3 Evaluation

Subject to the approval of Senate, the overall policy of evaluation and the planning of the programs of studies leading to the M.D. degree are the responsibility of the Undergraduate Medical Studies Committee, which is a standing committee of the Council of the Faculty of Medicine.

### 10.4 Assessment

1. Each student is expected to complete the work of the class as described in the current regulations of the Faculty of Medicine for each Phase of the program and to pass the prescribed academic and professional assessments. In this context, the professional assessments will cover not only the skills expected of a student, but personal conduct and relationships with peers, patients, hospital personnel, faculty members and staff.
2. Course grades are recorded as pass or fail on a student's University transcript. Within each Phase, there will be multiple prescribed assessments. For all Phases, assessment of an individual student's performance is the responsibility of the appropriate Phase Lead. Grades for all Phases may be reported using an internal scale.
a. The appropriate Phase Lead or designate is responsible for ensuring that each student is informed of the results of each assessment. The appropriate Phase Lead will notify the student, in writing, of any concerns that have arisen about performance. The Associate Dean, Undergraduate Medical Education will also be informed.
b. It is the responsibility of the student to consult immediately with the appropriate Phase Lead regarding any assessment in which concerns about performance have been expressed. Within one week of receiving notification of the result of an assessment, a student may submit a written request to the appropriate Phase Lead for reconsideration of the assessment result or for a reread of an exam or paper.
c. The student is responsible for notifying the appropriate Phase Lead immediately of any new or pre-existing circumstances that could affect the student's individual performance in the work of the class.
d. For exemptions from final examinations and procedures for applying to write deferred examinations - see UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Exemptions From Final Examinations and Procedures for Applying to Write Deferred Examinations.
3. A student's progress is monitored in each Phase of the program by the appropriate Phase Management Team.

### 10.5 Promotion

1. The Student Promotions Committee is a standing committee of Faculty Council. The Student Promotions Committee reviews all assessments of all students in each Phase. On the basis of this review, this Committee decides which students should be promoted to the next Phase and which students are eligible to graduate. In reaching its decisions the Student Promotions Committee takes into account professional, as well as academic factors, and any special circumstances, duly authenticated, which warrant consideration.
2. Within each Phase, students may be required to be reassessed or to remediate with re-assessment in order to demonstrate competence and understanding of the required learning objectives. The amount and quality of remediation and reassessment required of a student is at the discretion of the appropriate Phase Management Team. Students with a Fail grade in any course cannot be promoted to the next Phase.
3. Even in the absence of any Fail grades, a student for whom substantial concerns about performance have been expressed may either be required to repeat the Phase or required to withdraw conditionally or unconditionally.
4. A student who is deemed by the Student Promotions Committee to be unsuitable for promotion or graduation is either required to repeat the Phase or required to withdraw either conditionally or unconditionally.
a. If a student is required to repeat a Phase with academic prejudice, the student's performance in the repeated Phase must be at a level at which no remediation or reassessment is required. If this standard is not met, the Student Promotions Committee requires the student to withdraw unconditionally. The option to repeat a Phase with academic prejudice can only be offered to a student once during the student's M.D. program.
b. A student may repeat a Phase without academic prejudice if it has been demonstrated that the student's performance has been adversely affected by other factors acceptable to the Student Promotions Committee and duly authenticated.
c. If the Student Promotions Committee requires a student to withdraw conditionally, the Chair of the Student Promotions Committee informs the Dean and the appropriate Phase lead about the nature of the conditions to be met and the time period specified for meeting the conditions. The Dean then recommends to the Registrar that the student be required to withdraw from the program. Any student who has been required to withdraw conditionally may be readmitted once the conditions have been met. If the conditions are not met within the specified time limit, the student is required to withdraw unconditionally.
d. If the Student Promotions Committee requires a student to withdraw unconditionally, the Chair of the Student Promotions Committee will report the decision and the basis upon which it was reached to the Dean and the appropriate Phase lead. The Dean then recommends to the Registrar that the student be required to withdraw from the program. Any student who is required to withdraw unconditionally and who wishes to re-enter the Faculty must apply by the appropriate deadline date to the Admissions Committee in competition with all other applicants.
5. A student has the right to make a formal appeal against a decision of the Student Promotions Committee. However, this appeal cannot be made on the basis of the grades awarded in individual courses, as the student will normally have had the opportunity of contesting grades and assessment results immediately after notification. A formal appeal by a student against the decision of this Committee must be made on grounds other than the grades awarded, e.g. default of procedure. This appeal should be made in writing, clearly stating the basis for the appeal and should be directed in the first instance to the Dean. The Dean in consultation with the Office of the Registrar determines whether or not the grounds stated are sufficient to warrant a formal hearing of the appeal.
Details regarding the appeal process are available on the Faculty of Medicine website under Student Promotions Appeal Procedure.
6. In addition to the above clauses, the Faculty of Medicine reserves the right to require a student to withdraw from the program at any time when acceptable cause is demonstrated. In such cases, the Dean, on behalf of the Faculty, recommends such withdrawal to the Registrar who will then take appropriate action. Any such action is subject to the right of appeal by the student. An appeal should be made in writing clearly stating the basis for the appeal and should be directed in the first instance to the Registrar of the University. The Registrar, in consultation with the Dean, will determine whether or not the grounds stated are sufficient to warrant a formal hearing of the appeal.
7. Any student who enters the first Phase of the medical program but withdraws within the first seven weeks may be permitted re-entry only by re-application to the Admissions Committee in competition with all other applicants by the appropriate deadline date. Withdrawal at all other times is in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).
8. a. Upon completion of a Phase or after the completion of 8710 and 8720 in Phase four, a student in good academic standing may elect to withdraw temporarily from studies (e.g. to pursue graduate studies).
b. Any student may be permitted to withdraw in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Withdrawing From The University. In all cases, the intent to withdraw voluntarily should be discussed the appropriate Phase Lead. The student must make a written request for voluntary withdrawal to the Dean who will then consult the appropriate Phase Lead. In the event that a student wishes to return to medical school, the Dean should ensure that sufficient revision and preparatory work are undertaken before the student is permitted to resume medical studies.
c. Students permitted to withdraw are advised of the date upon which they are required to resume medical studies. In the absence of good cause, any such student who does not resume studies on the specified date will be deemed to have left the program.

### 10.6 Curricúlar Requirements (M.D.)

Students entering the M.D. program will be governed by curricular requirements in effect at the time of their admission. In the event of readmission, students will be governed by curricular requirements in effect at the time of their readmission.
The Student Promotions Committee recommends to Faculty Council those students to be awarded the M.D. degree.

## 11 Course Descriptions

The courses in all Phases form a continuum. Each Phase provides blended and clinical learning experiences in the medical school, teaching hospitals and community sites. In Phase 4, the students become members of the patient care team and have graded and supervised responsibility. In any given course, multiple teaching and learning methods such as lectures, small group discussion, labs and self-directed learning will be used.

### 11.1 Phase (1-Health and Its Promotion

5710 The Healthy Person introduces students to the structure and function of healthy people in all age groups in an integrated way. Students will learn in the context of a person as part of a family in a community. Students will begin to examine their future roles as professionals in our health care system.
CH: 19
5720 Clinical Skills I introduces students to the main elements of the medical interview and techniques of interviewing. Students will develop skills in examining healthy individuals within all age ranges. Communication and
collaboration skills will be developed in the context of patient-centered care and working with other health care providers.
AR: attendance is required
5730 Physician Competencies I introduces students to concepts that encompass the non-medical expert physician roles of scholar, communicator, collaborator, advocate, manager and professional in the context of the healthy person, family and the physician within health care systems.

5740 Community Engagement I places students in community sites for two weeks to experience a variety of aspects of the health care system with various health agencies, a family physician, and other health care providers.
$A R$ : attendance is required

### 11.2 Phase 2 - Disease Prevention and Disruptions of Health

6750 The Patient: Acute or Episodic Health Problems has students build on their knowledge of the normal structure and function of the body and analyze disruptions in health by exploring the pathophysiology of illnesses, their risk factors and risk prevention strategies.

[^21]CH: 21
6760 Clinical Skills II has students develop clinical reasoning skills used in patient-centered care using focused interviewing, examination, and communication skills.
AR: attendance is required
6770 Physician Competencies II has students apply concepts that encompass the non-medical expert physician roles of scholar, communicator, collaborator, advocate, manager and professional in the context of the patient's change in health status management and prevention.

6780 Community Engagement II places students in physicians' practices for two weeks to further experience interactions among patients, their family physician and the health care system when presenting with a change in health status.
AR: attendance is required

### 11.3 Phase 3 - Diagnosis and Investigation of IIIness and Disease

7710 The Patient: Chronic Conditions has students apply knowledge of reversible or modifiable health problems to chronic conditions for diagnosis and management of the patient.
CH: 36
7720 Clinical Skills III has students advance their assessment skills of patients who have chronic health issues. They will develop verbal and written communication skills required for patient-centered care.
$A R$ : attendance is required
7730 Physician Competencies III continues to develop student competencies in the non-medical expert physician roles introduced in previous special project courses.
7740 Phase 4 Preparation introduces students to skills required to succeed in their clinical experiences to achieve a level of competency for Phase 4. AR: attendance is required

7750 Community Engagement III allows students to further explore the interactions between patients and the health care system.
AR: attendance is required

### 11.4 Phase 4 - Integration Into Clinical Practice

Phase 4 begins with students taking the core courses 8710 and 8720. These courses will be followed by 12 weeks of elective experiences and 12 weeks of advanced practice.
8710 Core Experiences immerses students in the clinical environment through experiences in core disciplines including internal medicine, surgery, obstetrics and gynecology, rural family practice, paediatrics and psychiatry.
AR: attendance is required
CH: 56
8720 Advanced Procedural Competencies provides students with opportunities to advance their procedural and clinical skills to promote
patient safety and work effectively in team settings.
AR: attendance is required
CH: 2
8730 Electives are offered in two - four week blocks in approved areas of study for a maximum of twelve weeks.
AR: attendance is required
CH: 12
8740 Advanced Practice Integration enables students to be assigned to a physician, physician group or discipline for experiences that focus on following patients as they interact with the health care system.
$A R$ : attendance is required
CH: 12
8750 Practice Continuum will focus on the transition to postgraduate training as a part of the continuum of medical education.
$A R$ : attendance is required
CH: 1

### 11.5 Advanced Career Planning

8999 Advanced Career Planning information is available at the MedCAREERS website.
$A R$ : attendance is required
CH: 0
PR: permission of the Associate Dean, Undergraduate Medical Education (UGME)
UL: not applicable to the Doctor of Medicine (M.D.) program

### 11.6 Courses Offered By the Faculty of Medicine for Non-Medical Students

310A and 310B Human Physiology covers the properties of nerve and muscle cells, the special senses, blood and body fluids, and the nervous, cardiovascular, digestive, immune, respiratory urinary, endocrine and reproductive systems. Integration of the body's systems in maintaining homeostasis is emphasized. Priority for entry into this course is given to Biochemistry, Nutrition, Dietetics, and other students who are interested in experimental science.

CH: 6
CO: Biochemistry 2201 or the former 2101
CR: Biochemistry 311A/B
LH: to be specified
4300 Introduction to General and Autonomic Pharmacology deals with the general principles of pharmacology (dose-response relationship, drugreceptor interaction, absorption, distribution, metabolism, excretion of drugs), and drugs that affect neuromuscular and autonomic neurotransmission, the cardiovascular, gastrointestinal, and central nervous systems, and autacoids/prostanoids.
CO: Biochemistry 3206 or 3106, or Pharmacy 3111
CR: the former Biochemistry 4220
LH: to be specified
PR: Medicine 310A/B or Biochemistry 311A/B, or Pharmacy 2002/2003 or the former Pharmacy 3201/3202



## SCHOOL OF MUSIC

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www.mun.ca/music
Dean
Sutherland, I., B.Mus.(Hons.), M. Mus. Memorial, Ph.D. University of Exeter, U.K.; Associate Professor
Up-to-date personnel listings are available at www.mun.ca/music/people.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 School Description

The School of Music at Memorial University of Newfoundland is the largest and most comprehensive university school of music in Atlantic Canada. Four-year undergraduate programs are offered in performance, musicologies and composition. Students interested in music education have two options: the conjoint degrees of Bachelor of Music/Bachelor of Music Education (B.Mus./B.Mus.Ed.), offered in collaboration with Memorial University of Newfoundland's Faculty of Education, which can be completed in five years; and the fouryear Comprehensive Major, which prepares them to apply for admission to the Bachelor of Music Education as a second degree. For students not ready to specialize, a Bachelor of Music (B.Mus.) in General Musical Studies with or without a Minor provides a flexible degree option. The School of Music's faculty comprise a diverse group of performers and scholars from across North America and Europe who are as dedicated to the highest standard of teaching as they are to their own professional careers. Access to professional applied studies instruction is a right of every student in each year of the program. With close to 200 degree-stream students, the School offers ensemble performance experience in choir, wind ensemble, orchestra, opera, jazz, world music, contemporary and chamber music. While the focus of the School's programs is on the classical music tradition, Newfoundland and Labrador's rich musical legacy is also honored in its curriculum with a range of courses taught by tradition-bearers from the professional music community. The School's undergraduate community is enriched by the presence of students pursuing Master of Music (M.Mus.) degrees in performance, performance/pedagogy and conducting, as well as Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.) students in the area of ethnomusicology.
Additional information regarding the School of Music is available at www.mun.ca/music.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ĉa/scholarships/scholarships.

### 3.1 Health Statement

Music study and music making are activities that demand great mental and physical energy and coordination. For this reason, students are strongly encouraged to maintain a healthy lifestyle, getting adequate rest, proper nutrition, and exercise, and avoiding practices that could be detrimental to good health and well-being.

## 4 Description of Programs

All courses in the School of Music âe designated by the abbreviation MUS.

### 4.1 Bachelor of Music

The School offers a four-year Bachelor of Music with Majors in:

### 4.1.1 Composition

This Major is recommended for students who plan to compose or to teach composition.

### 4.1.2 Comprehensive

This major is recommended for students planning to apply for admission to the Bachelor of Music Education as a Second Degree.

### 4.1.3 General Musical Studies

This Major is recommended for students seeking a broad knowledge of music that will prepare them for a variety of career and advanced study options. Students have the option of including a Minor in a discipline other than Music.

### 4.1.4 Musicologies

This Major is recommended for students interested in research in music and/or media professions. A variety of approaches to music scholarship are addressed, including music history, ethnomusicology, and popular music studies.

### 4.1.5 Performance

This Major is recommended for students planning to pursue a career as a solo performer, orchestral or band player, university-based musician or private teacher.

### 4.1.6 Joint Major in Performance and Musicologies

This Major is recommended for students who have both advanced performance skills and an interest in music research. Students who are planning careers in specialized performance, music editing or as university-based musicians are encouraged to consider this Major.

### 4.1.7 Major in Performance with a Minor in Composition

This Major is recommended for students who have both advanced performance skills and an interest in music theory and composition. Students who are planning careers in performance, music editing, conducting, arranging, composing or as university-based musicians are encouraged to consider this program.

### 4.2 Five Year Bachelor of Music Conjoint with Bachelor of Music Education

This degree program is offered jointly with the Faculty of Education, and is recommended for candidates planning to pursue a career in Music Education.

### 4.3 Joint Degrees of Bachelor of Music and Bachelor of Business Administration

This five-year, 160 credit hour program is offered jointly with the Faculty of Business Administration and is recommended for individuals planning to pursue a variety of careers in the music, creative and cultural industries from entrepreneurial ventures (e.g. performance, composition, studio teaching, digital media) to professional and managerial work within established businesses and organizations.

### 4.4 Interdisciplinary Minor in Music and Culture

This Minor is available to students in the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Commerce (Cooperative), Bachelor of Recreation, Bachelor of Recreation (Honours), Bachelor of Recreation (Cooperative), and Bachelor of Recreation (Cooperative) (Honours).

### 4.5 Minor in Music History

This Minor is available to students in the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Commerce (Cooperative), Bachelor of Recreation, Bachelor of Recreation (Honours), Bachelor of Recreation (Cooperative), and Bachelor of Recreation (Cooperative) (Honours).

### 4.6 Honours Degree

An honours degree signifies superior academic achievement. The Bachelor of Music (Honours) is available to candidates in the Performance, Composition, Musicologies, General Musical Studies, and Comprehensive Majors, candidates in the Joint Major in Performance and Musicologies, and candidates in the Major in Performance with a Minor in Composition. To be considered for an Honours Degree, the student must so indicate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation. For further information on honours degrees see Bachelor of Music (Honours).

## 5 Admission/Readmission Regulations for the School of Music

In addition to meeting the UNIVERSITY REGULATIONS, students must meet the Admission/Readmission Regulations for the School of Music.

### 5.1 General Information

1. Entry to the School of Music is competitive and by audition only.
2. Admission or readmission to the University does not necessarily constitute admission or readmission to any program.
3. As part of the regular admissions quota, one seat per year is available in the Bachelor of Music program for applicants of First Nations/Abofiginal ancestry who have met the minimum academic and performance requirements for admission to the program. Applicants must provide documentation of First Nations/Aboriginal ancestry. Applicants may also. if they wish, submit a letter of request at the time of application.
4. A minimum grade of $65 \%$ is required for transfer credit to be given towards a student's Music degree program for any course taken at an institution other than Memorial University of Newfoundland. Transfer credit cannot be awarded for Principal Applied Music courses which inclûde: Music 140A/B, Music 240A/B, Music 340A/B, Music 345A/B, Music 440A/B, and Music 445A/B.

### 5.2 Application Forms and Deadlines

1. Admission to the Bachelor of Music degree is normally possible in the Fall semester only. The application deadline for admission to the Fall semester is January 15.
2. Transfer students may be considered for admission in the Winter semester if they have the prerequisites to enter a sufficient number of music courses in that semester. The application deadline for admission to the Winter semester is September 30.
3. Students who have withdrawn from the music degree program may apply to be readmitted in either the Fall or Winter semester.
4. The application for admission or readmission to programs offered by the School of Music is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

### 5.3 Admission/Readmission Requirements to the Bachelor of Music Degree Program

In addition to meeting these requirements, applicants for the Joint Degrees of Bachelor of Music and Bachelor of Business Administration must meet additional requirements as outlined under Joint Degrees of Bachelor of Music and Bachelor of Business Administration, Admission Requirements below.

1. All applicants are required to audition to the satisfaction of the School on the instrument that they have chosen as their Principal Applied Study in their degree program.
a. The School offers instruction in voice, piano. organ, flute, clarinet, saxophone, oboe, bassoon, trumpet, horn, euphonium, trombone, tuba, percussion, guitar, violin, viola, cello and double bass. Audition requirements for each instrument may be obtained from the School of Music General Office or online at www.mun.ca/music.
b. Auditions are normally held in early March. Dates and locations of upcoming auditions are available from the School of Music General Office or online at www.mun.ca/music/programs.
c. Late auditions may be held if space is available. Students auditioning late are normally not eligible for School of Music entrance scholarships.
d. Transfer students and students seeking readmission to the music degree program must audition to determine their placement in applied study courses. The level of audition should be equivalent to the jury requirements for the prerequisite of the course to which they are seeking admission. Jury requirements are available from the Office of the School of Music or through the School of Music website at www.mun.ca/music.
e. Transfer credit is not normally awarded for Music 4095, Music 4140 and Principal Applied Study courses.
2. All applicants are also required to take the following admission and placement tests:
a. Placement Test in Theory and Musicianship: This test in basic rudiments, aural perception, and simple four-part harmony will be administered during the entrance audition period.
b. Sightsinging Test: This short test is administered individually.
c. Piano Proficiency Test: This test assesses students' basic keyboard skills. Successful completion of the test is a prerequisite to required second-year core program courses. Students are advised to contact the School of Music regarding scheduling of the test and for information about private remedial piano instruction.
d. Writing Test: This test is administered during the entrance audition period. It is intended to assess students writing skills and their capacity to articulate ideas about music.
3. The School will notify applicants in writing when a decision has been made regarding admission.

### 5.4 Major

1. With the exception of the Comprehensive Major, candidates normally declare their intended Major area of study in their fourth semester in the Bachelor of Music program.
2. A candidate may not change the Major without the written permission of the Dean. In cases where permission is granted, the candidate shall be required to fulfill all requirements for the new Major. However, in the case where a student's Major changes from Performance to one of the other Majors, the Principal Applied Study courses successfully completed under the Performance Major may be used to satisfy the requirements for Principal Applied Study in the new Major, with any additional credit hours being used as Music electives in the new Major.
3. Candidates shall choose one of the following areas for their Major:

### 5.4.1 Composition

Students interested in the Composition Major are strongly encouraged to take Music 3100 in their second year. Candidates for this Major must apply in writing to the Dean by February 15th in the semester during which they are registered for Music 2108, submitting up to three of their own compositions by the end of classes in that semester. Candidates will be interviewed by a panel of composition faculty. Admission to this Major will be based on the candidate's: 1) submitted compositions, 2) interview, 3) achievement in Music 1107, 1108, 1700, 2107, 2108, 3100 and any other elective courses in music theory and composition, 4) general academic achievement, and 5) potential for a career and/or graduate work in composition.

### 5.4.2 Comprehensive

Candidates planning to apply for admission to the Conjoint degrees (Bachelor of Music/Bachelor of Music Education) should first declare the Comprehensive Major by the end of their second semester in the Bachelor of Music program in order to take the necessary prerequisite courses for admission to the Conjoint degrees program. Students planning to apply for admission to the Bachelor of Music Education as a second degree may wait until their fourth semester to declare this Major. Please note that completion of this degree does not guarantee admission to the Faculty of Education.

### 5.4.3 General Musical Studies

Candidates for the General Musical Studies Major need not submit an application. All candidates who have not been admitted to another Major by the end of their fourth semester in the Bachelor of Music program will automatically be admitted to the General Musical Studies Major. Students have the option of including a Minor in a discipline other than Music, in which case they must meet all prerequisites and requirements for the Minor. The subject of the candidate's Minor shall be that declared by the candidate on the Change of Academic Program Form, which is available at www.mun.ca/regoff/registration/Declare_Change_Academic_Program.pdf or in person at the Office of the Registrar.

### 5.4.4 Musicologies

Candidates for this Major must apply in writing to the Dean by February 15th in the semester during which they are registered for Music 2006, submitting up to three pieces of relevant work by the end of classes in that semester, including essays or analyses written either in the context of academic course work or independently. Candidates will be interviewed by a panel of faculty in this discipline. Admission to this Major will be based on the candidate's: 1) submitted work, 2) interview, 3) achievement in Music 1005, 1006, 2005, 2006 and any electives in musicologies, as well as English, Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses, 4) general academic achievement, and 5) potential for a career and/or graduate work in musicology, ethnomusicology, journalism or a related field.

### 5.4.5 Performance

Candidates for this Major must apply in writing to the Dean normally by the end of the fourth week of classes in the semester during which they are registered for Music 240B. Candidates are required to audition for this program and will be evaluated by a performance jury. A reference letter from the applied instructor must be submitted to the Dean prior to the jury taking place. Where possible, the jury examination for Music 240B and for admission to the Performance Major will be the same. Admission to this Major will be based on a candidate's: 1) performance on the audition and achievement in Music 140A/B and 240A/B, normally represented by a minimum $85 \%$ grade in Music 240A, 2) general academic achievement, normally represented by a minimum $70 \%$ average in Music courses, and, 3) potential for a career and/or graduate work in performance.

### 5.4.6 Joint Major in Music Performance and Musicologies

Candidates for the Joint Major must apply in writing to the Dean by February 15th in the semester during which they are registered for Music 240B. Candidates for admission to the Joint Major must fulfill the requirements for admission to both the Performance and Musicologies Majors.

### 5.4.7 Major in Music Performance with a Minor in Composition

Candidates for this Major must apply in writing to the Dean by February 15th in the semester during which they are registered for Music 240B. Candidates must fulfill the requirements for admission to both the Performance and Composition Majors.

### 5.4.8 Bachelor of Music Conjoint with Bachelor of Music Education

This program is offered with the Faculty of Education, and is recommended for candidates planning to pursue a career in Music Education. Candidates for the Conjoint Degrees program must meet the Faculty of Education's admission requirements for the Bachelor of Music Education Conjoint Degree program. Applications must be submitted to the Faculty of Education by January 15 for admission to the following Fall semester.

### 5.4.9 Joint Degrees of Bachelor of Music and Bachelor of Business Administration

This program is offered with the Faculty of Business Administration and is recommended for applicants planning to pursue a variety of careers in the music, creative and cultural industries from entrepreneurial ventures (e.g. performance, composition, studio teaching, digital media) to professional and managerial work within established businesses and organizations. Applicants for the joint degrees program must meet the Admission/Readmission Requirements to the Bachelor of Music Degree Program, must be admitted to the Bachelor of Music Degree program, and must select the Bachelor of Business Administration Degree program on their online application to the University or on the Declaration/Change of Academic Program Form. Applications must be submitted by January 15 for admission to the following Fall semester.

### 5.4.9.1 Admission Requirements

1. Admission to the program is competitive and selective. Prospective students are therefore encouraged to consider an alternate degree program in the event that they are not accepted into the Joint Degrees of Bachelor of Music and Bachelor of Business Administration program.
2. Applicants who have been awarded a Bachelor of Music Degree or an undergraduate Business degree from this University may not complete the Joint Degrees of Bachelor of Music and Bachelor of Business Administration.
3. Applicants for the Joint Degrees of Bachelor of Music and Bachelor of Business Administration program must meet the Admission/Readmission Requirements to the Bachelor of Music Degree Program and must be admitted to that program.
4. All applicants must submit a 750 -word letter of motivation highlighting the applicant's relevant past experiences, career plans, and motivation for pursuing the joint degrees program.
5. Applicants may be requested to attend an interview.

### 5.5 Admission Requirements to Minor Programs

1. The Interdisciplinary Minor in Music and Culture and Minor in Music History are available to students in the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Commerce (Cooperative), Bachelor of Recreation, Bachelor of Recreation (Honours), Bachelor of Recreation (Cooperative), and Bachelor of Recreation (Cooperative) (Honours). Students wishing to complete either of these minors must declare so on the Change of Academic Program Form, which is available at www.mun.ca/regoff/registration/Declare_Change_Academic_Program.pdf or in person at the Office of the Registrar.
2. Students wishing to be considered for admission to the Minorin Music History must also meet the prerequisites for Music 1107 and 1117.

## 6 Bachelor of Music Degree Regulations

Students admitted or readmitted to the School of Music before Fall 2012 must follow the regulations outlined in the 2012-2013 University Calendar under Bachelor of Music Degree Regulations, Transition to New Bachelor of Music Degree Program. In addition Table 1 Substitutions for Music Courses Required Under Previous Regulations lists the courses that students following the regulations of an earlier Calendar may substitute for required courses that are no longer offered. Table 2 Substitution of Former Courses For Courses in This Calendar lists the former courses that may be substituted for courses required under this Calendar which were not offered before Fall 2012. Both Tables may be found at www.mun.ca/music/current/courseinfo/crse_subs.php.

### 6.1 Program Regulations

1. Students admitted to the Bachelor of Music program may register for a maximum of 18 credit hours per semester without written permission from the Dean.
2. A student may not repeat for credit a Principal Applied Study course that the student has already successfully completed, unless the student has the written permission of the Dean.
3. Active participation in School of Music ensembles is an integral part of a music student's education. One must be present at rehearsals and performances to have participated in the learning experience. Furthermore, the success of the ensemble as a whole is dependent upon the regular attendance and participation of all of its members. Accordingly, attendance will be required in the following courses: Music 2611-2620, Music 263A/B, Music 265A/B, Music 3500, and Music 3511-3518.
4. The following Music courses may not be counted toward the Bachelor of Music degree: Music 1105, 1106, 1120, 2011, 2012, 2013 and 2014.

### 6.2 Core Program Requirements

All Bachelor of Music students, regardless of Major, must complete the following courses ( 55 credit hours) as outlined below:

1. Applied Music ( 8 credit hours): 140A/B, 240A/B
2. Musicologies ( 15 credit hours): $1005,1006,2005,2006,3009$

## 3. Music Theory (19 credit hours):

a. Written Theory: 1107, 1108, 2107, 2108, 3105
b. Aural Skills: 1117, 1118, 2117, 2118
4. Music Technology (1credit hour): Music 1700
5. Functional Keyboard (1 credit hour): 2401 or 2411, 2402 or 2412
6. Ensemble I: 1 credit hour from Music 3517 or 3518
7. Ensemble II: 10 credit hours according to Principal Applied Study below:
a. Voice: Music 2700 and 2701, and 2 credit hours from Music 2611-2612, plus 6 additional credit hours from Music 2611, 2612, 2616, 2617. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
b. Piano, Organ, or Guitar: 2 credit hours of music electives chosen from courses beyond the 1000 level, and 2 credit hours from Music 2611-2612, plus 6 additional credit hours from Music 2611-2620. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
c. All other Principal Applied Study, i.e. percussion or a string or wind instrument: 2 credit hours from Music 2611-2612, plus 8 credit hours from Music 2613, 2614, 2615, 2619, 2620. Students will be placed in two of these ensemble courses during each semester in which they are enrolled in Music 140A/B and in one ensemble course during each subsequent semester of Principal Applied Study. Ensemble assignments will be based on their ensemble auditions, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
8. The remaining credit hours for the degree are determined according to the student's Major, as below.

### 6.3 Composition Major

To be awarded the degree of Bachelor of Music in Composition, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the Core Program. The remaining 68 credit hours will be chosen as follows:

1. Music 340A/B, 440A/B.
2. Six credit hours of Music 3140 and 6 credit hours of Music 4140
3. Music 3104, 3112, 4112 and one of Music 3106 and 3108.
4. Twelve additional credit hours chosen from Music courses beyond the 1000 level including:
a. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the Core Program.
b. A maximum of 5 credit hours from Music $2615,2616,2617,265 A / B, 3500$, the former $3510,3511-3518$ in addition to those listed under the Core Program.
c. No more than one of Music 2021, 2022 and 2023.
d. Students interested in this Major are strongly encouraged to take Music 3100 in their second year.
5. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses.

### 6.4 Comprehensive Major

To be awarded the degree of Bachelor of Music with a Comprehensive Major, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the Core Program. The remaining 68 credit hours will be chosen as follows:

1. Music 340A/B, 440A/B
2. Music 3300 and 3301
3. Four credit hours of instrumental techniques courses, chosen as follows:
a. Music 3221 or 3222
b. One of Music 3231, 3232, 3233
c. Music 3241 or 3242
d. Music 3281 or 3282

Music 3401 or 3411,3402 or 3412.
5. Twenty-five additional credit hours chosen from Music courses beyond the 1000 level including:
a. At least 3 credit hours chosen from courses beyond the 2000 level in Musicologies and Music Theory/Composition.
b. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the Core Program.
c. A maximum of 5 credit hours from Music $2615,2616,2617,265 \mathrm{~A} / \mathrm{B}, 3500$, the former 3510,3511 - 3518 in addition to those listed under the Core Program.
d. No more than 3 credit hours from Music 2021, 2022 and 2023.
e. Three credit hours chosen from the following may be substituted for Music electives in the Comprehensive Major: Education 2500, 2515, 2520.
6. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses.

### 6.5 General Musical Studies Major

To be awarded the degree of Bachelor of Music in General Musical Studies, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the Core Program. The remaining 68 credit hours will
be chosen as follows:

1. Music 340A/B, 440A/B.
2. An additional 60 credit hours to be chosen according to either Option A or Option B below:

### 6.5.1 Option A (With Minor)

1. An additional 21 credit hours chosen from Music courses beyond the 1000 level, including:
a. At least 6 credit hours chosen from courses beyond the 2000 level in Musicologies and Music Theory/Composition.
b. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the Core Program.
c. A maximum of 5 credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former $3510,3511-3518$ in addition to those listed under the Core Program.
d. No more than one of Music 2021, 2022 and 2023.
2. Six credit hours chosen from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/ Writing (R/W) courses.
3. A Minor of at least 24 credit hours in a subject other than Music. The candidate must follow the regulations for the Minor as set forth in the appropriate section of the Calendar.
4. Nine credit hours of open electives which may be chosen from courses in Music, the Minor subject, and/or any other disciplines. However, no more than 3 credit hours in Music Education may be included.

### 6.5.2 Option B (No Minor)

1. An additional 36 credit hours chosen from music courses beyond the 1000 level including:
a. At least 12 credit hours chosen from courses beyond the 2000 level in Musicologies and Music Theory/Composition.
b. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the Core Program.
c. A maximum of 5 credit hours from Music 2615, 2616, 2617, 265A/B, 3500 , the former $3510,3511-3518$ in addition to those listed under the Core Program.
d. No more than one of Music 2021, 2022 and 2023.
e. A maximum of 3 credit hours chosen from the following courses may be substituted for Music electives: Education 2500, 2515, 2520. Music Education Majors have priority in registering for these courses and spaces may not be available for General Musical Studies Majors
2. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses.

### 6.6 Musicologies Major

To be awarded the degree of Bachelor of Music in Musicologies, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the Core Program. The remaining 68 credit hours will be chosen as follows:

1. Music $340 \mathrm{~A} / \mathrm{B}, 440 \mathrm{~A} / \mathrm{B}$
2. Music 4095
3. Fifteen additional credit hours beyond the 2000 level in Musicologies
4. Six credit hours chosen from Anthropology, Canadian Studies, European Studies, Folklore, Gender Studies, History, Law and Society, Medieval Studies, Newfoundland and Labrador Studies, Philosophy, Political Science, Psychology, Religious Studies, and/ or Sociology.
5. Twelve additional credit hours chosen from music courses beyond the 1000 level including:
a. A maximum of 4 credit hours from Music $2611-2614,2619,2620$, and 263A/B, in addition to those listed under the Core Program.
b. A maximum of 5 credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518 in addition to those listed under the Core Program.
c. No more than one of Music 2021, 2022 and 2023.
6. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses and at least 6-credit hours in a language or languages other than English.

### 6.7 Performance Major

To be awarded the degree of Bachelor of Music in Performance, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the Core Program. The remaining 68 credit hours will be chosen as follows:

1. Music $345 \mathrm{~A} / \mathrm{B}, 445 \mathrm{~A} / \mathrm{B}$.
2. Music 3704 and 3 credit hours chosen from Music 3722, 3732, 3742, 3751, 3764, 3774, 4701, 4702, 4703.
3. Six credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518.
4. Twenty additional credit hours from Music courses beyond the 1000 level, including:
a. At least 6 credit hours chosen from courses beyond the 2000 level in Musicologies and Music Theory/Composition.
b. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those outlined under the Core Program.
c. No more than one of Music 2021, 2022 and 2023.
d. A maximum of 3 credit hours chosen from the following courses may be substituted for Music electives: Education 2500, 2515, 2520. Music Education Majors have priority in registering for these courses and spaces may not be available for Performance

Majors.
5. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses. Students whose Principal Applied Study is Voice must include at least 3 credit hours in each of Italian, German and French.

### 6.8 Joint Major in Performance and Musicologies

To be awarded the degree of Bachelor of Music with a Joint Major in Performance and Musicologies, a candidate shall comply with the School's regulations, and successfully complete a minimum of 127 credit hours, including 55 credit hours in the Core Program. The remaining 72 credit hours will be chosen as follows:

1. Music 345A/B, 445A/B.
2. Three credit hours chosen from Music 3704, 3722, 3732, 3742, 3751, 3764, 3774, 4701, 4702, 4703.
3. Six credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518.
4. Music 4095.
5. Fifteen additional credit hours beyond the 2000 level in Musicologies.
6. An additional 3 credit hours chosen from music courses beyond the 1000 level.
7. Thirty credit hours chosen from disciplines other than Music, including:
a. At least 6 credit hours chosen from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses.
b. 6 credit hours in Anthropology, Canadian Studies, European Studies, Folklore, Gender Studies, History, Law and Society, Medieval Studies, Newfoundland and Labrador Studies, Philosophy, Political Science, Psychology, Religious Studies, and/or Sociology.
c. At least 6 credit hours in a language or languages other than English. Students whose Principal Applied Study is Voice must include at least 3 credit hours in each of Italian, German, and French

### 6.9 Major in Performance with a Minor in Composition

To be awarded the degree of Bachelor of Music with a Major in Performance and a Minor in Composition, a candidate shall comply with the School's regulations, and successfully complete a minimum of 124 credit hours, including 55 credit hours in the Core Program. The remaining 69 credit hours will be chosen as follows:

1. Music 345A/B, 445A/B.
2. Music 3704 and 3 credit hours chosen from Music $3722,3732,3742,3751,3764,3774,4701,4702,4703$.
3. Six credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518.
4. Six credit hours of Music 3140.
5. Music 3104,3112 and one of Music 3106 or 3108.
6. Six credit hours chosen from Music courses beyond the 1000 level including:
a. A maximum of 4 credit hours from Music $2611-2614,2619,2620$, and $263 A / B$, in addition to those listed under the Core Program.
b. A maximum of 5 credit hours from Music $2615,2616,2617,265 \mathrm{~A} / \mathrm{B}, 3500$, the former $3510,3511-3518$ in addition to those listed under the Core Program.
c. No more than 3 credit hours from Music 2021, 2022 and 2023.
d. Students interested in this Major are strongly encouraged to take Music 3100 in their second year.
7. Twenty-four credit hours chosen from disciplines other than Music or Music Education, including at least 6 credit hours chosen from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses. Students whose Principal Applied Study is Voice must include at least 3 credit hours in each of Italian, German, and French.

### 6.10 Bachelor of Music Conjoint with Bachelor of Music Education

To be awarded the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education, a candidate shall comply with the School's regulations and successfully complete a minimum of 159 credit hours, including 55 credit hours in the Core Program. The remaining 104 credit hours will be chosen as follows:

Music 340A/B, 440A/B.
2. Music 3300 and 3301
3. Eight credit hours chosen from: Music 3221, 3222, 3231, 3232, 3233, 3241, 3242, 3261, 3281, 3282.
4. Music 3401 or 3411,3402 or 3412.
5. Twelve additional credit hours chosen from Music courses beyond the 1000 level including:
a. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the Core Program.
b. A maximum of 5 credit hours from Music 2615, 2616, 2617, $265 \mathrm{~A} / \mathrm{B}, 3500$, the former $3510,3511-3518$ in addition to those listed under the Core Program.
c. No more than 3 credit hours from Music 2021, 2022 and 2023.
6. Forty-five credit hours as prescribed by the Faculty of Education under the Regulations for the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education.
7. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses. Conjoint degrees students are strongly encouraged to take at least 18 credit hours in a second teachable subject.

### 6.11 Joint Degrees of Bachelor of Music and Bachelor of Business Administration

### 6.11.1 The Curriculum

1. To be considered for the award of the Joint Degrees of Bachelor of Music and Bachelor of Business Administration, a student shall comply with all regulations of the School of Music and the Faculty of Business Administration regarding the respective degrees, except:
a. Notwithstanding clauses 5., 6., and 7. of the Core Program under the Bachelor of Music Degree Regulations, students in the Bachelor of Music program who are concurrently completing the Bachelor of Business Administration program will be exempted from clauses 5. and 6., and will be permitted to replace clause 7. with the following:
Ensemble II: 10 credit hours according to Principal Applied Study below:
i. Voice: Music 2700 and 2701, and 2 credit hours from Music 2611-2612, plus 6 additional credit hours from Music 2611, 2612, 2616, 2617, 3517 or 3518 with a maximum of 1 credit hour from Music 3517-3518. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
ii. Piano, organ, or guitar: 8 credit hours chosen from Music 2611-2620, 3517, 3518 with at least 2 credit hours from Music 2611-2612 and no more than 2 credit hours from Music 3517-3518. An additional 2 credit hours of music electives chosen from courses beyond the 1000 level. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study and the need to create balanced ensembles.
iii. All other Principal Applied Study, i.e. percussion or a string or wind instrument: 10 credit hours from Music 2611-2615, 2619, 2620, 3517, 3518, with at least 1 credit hour chosen from Music 2611 or Music 2612, and no more than 1 credit hour chosen from Music 3517 or 3518. Students will be placed in one of these ensemble courses during each semester in which they are enrolled in Principal Applied Study. The assignment will be based on their ensemble audition, the appropriateness of the ensemble for the student's musical development and program of study, and the need to create balanced ensembles.
b. Notwithstanding clause 2.e. of The Curriculum under Regulations for the General Degree of Bachelor of Business Administration (B.B.A.), students in the Bachelor of Business Administration program who are concurrently completing the Bachelor of Music program will be permitted to replace that clause as follows: Business 1000, 1101,1210, 1600, 2010, $2101,2210,2400,2710,3310,3401,3700,4000,4050,4320,4330,4500,5301$, and 7002 . Students are encouraged to note the prerequisites for BUSI 7002 and to plan their courses so that they have completed the prerequisites prior to the semester in which they plan to take BUSI 7002.
c. These adjustments to the normal curriculum will only be permitted for students who are graduating with the Bachelor of Bachelor of Music and the Bachelor of Business Administration degrees at the same convocation. In order to meet all of the requirements of both degree programs at the same time, students who are completing the joint degrees are strongly advised to follow Table 1 Joint Degrees of Bachelor of Bachelor of Music and Bachelor of Business Administration Curriculum.
2. To be considered for the Joint Degrees of Bachelor Music and Bachelor of Business Administration, students must successfully complete the following 160 credit hours with a grade point average on those 160 credit hours of at least 2.5 and a numeric average on those 160 credit hours of at least $60 \%$.
a. 53 credit hours from the Bachelor of Music Core Program as modified in clause 1.a. above;
b. MUS 340A/B, 440A/B, 4800;
c. 6 credit hours chosen from Musicologies or Music Theory and Composition courses beyond the 2000 level;
d. 12 credit hours chosen from Music courses beyond the 1000 level including:
i. a maximum of 2 credit hours from MUS 2611-2614, 2619, 2620, 263A/B, in addition to those from the Music Core Program modified in clause 1.a. above;
ii. a maximum of 2 credit hours from MUS 2615-2617, 265A/B, 3514-3518 in addition to those from the Music Core Program modified in clause 1.a. above;
iii. no more than 3 credit hours from MUS 2021-2023;
iv. a maximum of 6 credit hours from MUS 3500-3513;

6 credit hours of English which must include English 1110 or 1021;
Mathematics 1000;
Economics 1010 and 1020;
Statistics 2500; and
Business 1000, 1101,1210, 1600, 2010, 2101, 2210, 2400, 2710, 3210, 3310, 3401, 3700, 4000, 4050, 4320, 4330, 4500, 5301, and 7002.

Table 1 Joint Degrees of Bachelor of Bachelor of Music and Bachelor of Business Administration Curriculum

| Fall Academic Term 1 | Business 1000 <br> Mathematics 1090 or 1000 [see note 1 below] <br> MUS 140A, 1005, 1107, 1117, 1700 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| :---: | :---: |
| Winter <br> Academic Term 2 | Business 1600 <br> Economics 1010 or Mathematics 1000 if not completed in Term 1 [see note 1 below] English 1090 <br> MUS 140B, 1006, 1108, 1118 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Fall <br> Academic Term 3 | Economics 1020 <br> English 1110 <br> MUS 240A, 2005, 2107, 2117 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Winter Academic Term 4 | Business 1210, 2010 <br> Economics 1010 if not completed in Term 2 [see note 1 below] <br> MUS 240B, 2006, 2108, 2118 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Fall <br> Academic Term 5 | Business 1101, 2210 <br> MUS 340A, 3009, 3105 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1, a. of The Curriculum |
| Winter Academic Term 6 | Business 2101, 2400 <br> MUS 340B <br> Statistics 2500 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Fall <br> Academic Term 7 | Business 2710, 3310, 3700 <br> MUS 440A <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Winter Academic Term 8 | Business 3401, 4000, 4330 <br> MUS 440B <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Fall Academic Term 9 | Business 4050, 4320, 4500 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum 3 credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum |
| Winter Academic Term 10 | Business 3210, 5301, 7002 <br> MUS 4800 <br> 1 credit hour chosen to meet Ensemble II credit requirements outlined in clause 1.a. of The Curriculum |
| Harlow Campus | Optional: 6 credit hours in the Harlow Music Semester offered at Harlow Campus. [see note 2 below] |

Notes: 1. Students who are required to take Mathematics 1090 prior to Mathematics 1000 should complete Mathematics 1090 in Term 1, Mathematics 1000 in place of Economics 1010 in Term 2, and Economics 1010 in Term 4.
2. Students who elect not to participate in the Harlow Music Semester offered at Harlow Campus must complete a total of 6 additional credit hours chosen to meet requirements outlined in clause 2.c. or 2.d. of The Curriculum as opportunities arise and as courses are offered during Term 5 through Term 10.
3. Students who wish to deviate from the above curriculum, including students who wish to complete online courses or courses in the Spring semester, Intersession, or Summer session, should consult with an advisor in the Faculty of Business Administration or the School of Music to ensure that they do not experience unforeseen delays in completing the joint degrees program.

### 6.12 Bachelor of Music (Honours)

The Bachelor of Music (Honours) will be awarded to candidates in the Performance, Composition, Musicologies, General Musical Studies, and Comprehensive Majors, candidates in the Joint Major in Performance and Musicologies, and candidates in the Major in Performance with a Minor in Composition who:

1. are graduating with First Class standing;
2. meet all the graduation requirements in the Bachelor of Music Degree Regulations for their Major; and
3. have attained a minimum average of $82 \%$ in all Music courses included in the degree.

## 7 Academic Standards and Continuance in the Bachelor of Music

1. The passing grade in Music $345 A / B$ and Music $445 A / B$ is $50 \%$. However, students must attain a minimum final grade of $75 \%$ in both the course and the recital in order to continue in, or graduate with, the Major in Performance.
a. Students who pass Music 345A/B but do not attain a grade of at least $75 \%$ in both the course and the recital will be unable to register for Music 445A and will be automatically registered in the General Musical Studies Major unless they request, and are granted admission to, another Major.
b. Students who pass Music $445 \mathrm{~A} / \mathrm{B}$ but do not attain a grade of at least $75 \%$ on both the course and the recital, but who meet all other requirements for the Performance Major, will be eligible to graduate with a major in General Musical Studies.
2. With the exception of those who have completed Music 440B or 445B, students who are not registered for a Principal Applied Study course or Education 403X at the end of the regular registration period will be deemed to have withdrawn from the Bachelor of Music degree program.
3. A student who withdraws from a Principal Applied Study course at any time in the semester shall have the eligibility to continue in
the degree program reviewed by the Committee on Undergraduate Studies. The Committee shall determine whether or not the student shall be deemed to have withdrawn.
4. A student whose average in Music courses falls below $65 \%$ in any semester will be placed on probation.
5. A student who is on probation will be returned to clear standing if the student achieves an average above $65 \%$ in music courses taken during the probation semester.
6. A student will be required to withdraw from the Bachelor of Music degree program if a) the student's average in music courses falls below $65 \%$ in each of two consecutive semesters of registration in the program, or b) the student's average in music courses falls below $65 \%$ in any three semesters of registration in the program, or $c$ ) the student fails any music course more than once, or d) the student has been unable to complete two consecutive semesters or three non-consecutive semesters of applied music studies (Music 140A/B, 240A/B, 340A/B, 440A/B, 345A/B, 445A/B).
7. Students who have withdrawn from the Bachelor of Music degree program and wish to re-enter the program must re-apply in competition. A student re-entering the program may be readmitted on probation if the Admissions Committee so recommends.
8. Students who have been required to withdraw from the Bachelor of Music degree program may apply for readmission after a minimum of two semesters have elapsed following the withdrawal.
9. Students who have been required to withdraw from the Bachelor of Music degree program twice are ineligible for further readmission.
10. Students who have withdrawn from the Bachelor of Music degree program may apply to be readmitted in either the Fall or Winter semester.

## 8 Minor Program Regulations

Students admitted or readmitted to the School of Music before Fall 2012 must follow the regulations outlined in the 2012-2013 University Calendar under Minor Program Regulations, Transition to New Minor Programs. Table 1 Substitutions for Music Courses Required Under Previous Regulations lists the courses that students following the regulations of an earlier Calendar may substitute for required courses that are no longer offered. In addition, Table 2 Substitution of Former courses For Courses in this Calendar lists the former courses that may be substituted for courses required under the current Calendar which were not offered before Fall 2012. Both Table 1 and Table 2 may be found on the School of Music website at www.mun.ca/music/current/courseinfo/crse_subs.php.

### 8.1 Interdisciplinary Minor in Music and Culture

1. This Minor is available to students in the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Commerce (Cooperative), Bachelor of Recreation, Bachelor of Recreation (Honours), Bachelor of Recreation (Cooperative), and Bachelor of Recreation (Cooperative) (Honours). The Minor in Music and Culture is not applicable to the Bachelor of Music degree.
2. Students shall complete 24 credit hours for the Minor in Music and Culture, as follows:
a. Music 1120, Music 1106, or Music 1107
b. Music 4040 or Folklore 4440
c. Music 2012 or 2013
d. One of Music 2011, 2014, Music 3017 or Folklore 3200, Music 3018 or Folklore 3618
e. One of Music 3014, 3015, 3016 and 3019
f. One of Music 2021, 2022, and 2023
g. Two additional courses chosen from Music 1108 or the courses listed in d., e., f., or g. above.
3. Please note that most Music courses are not offered every semester, and some are offered only in alternate years.

### 8.2 Minor in Music History

1. This Minor is available to students in the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Bachelor of Commerce (Cooperative), Bachelor of Recreation, Bachelor of Recreation (Honours), Bachelor of Recreation (Cooperative), and Bachelor of Recreation (Cooperative) (Honours). The Minor in Music History is not applicable to the Bachelor of Music degree.
2. To be admitted to the Minor in Music History, students must meet the prerequisites for Music 1107 and 1117.
3. Students shall complete the following requirements ( 29 credit hours) for the Minor in Music History.
a. Music $1107,1108,1117$, and 1118.
b. Music 1005, 1006, 2005, 2006, 3009
c. An additional 6 credit hours chosen from Music 3004, 3005, 3006, 3007, 4001, 4002, 4003, 4004, 4005.
4. Course prerequisites stipulated in the course descriptions must be met. Please note that most Music courses are not offered every semester, and some are offered only in alternate years.

## 9 Graduation

Upon meeting the qualifications for any of the programs of the School of Music a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar.

## 10 Waiver of School Regulations

Every student has the right to request waiver of School regulations. Students wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

1. The School reserves the right in special circumstances to modify, alter, or waive any School regulation in its application to individual students where merit and equity warrant in the judgement of the Committee on Undergraduate Studies of the School.
2. Waiver of a School course prerequisite or co-requisite may be granted by the Dean.
3. All other requests for waiver of a School regulation must be submitted in writing to the Chair of the Committee on Undergraduate Studies of the School for consideration. Medical and/or other documentation to substantiate the request must be provided.
4. Any waiver granted does not reduce the total number of credit hours required for the degree.

## 11 Appeal of Decisions

Any student whose request for waiver of School regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 12 Music Courses Available to Students not Enrolled in a Program Offered by the School

1. The following Music courses are available to students who have not been admitted to a program in the School of Music, and are appropriate for students with little or no musical background:
Music 1105 Elements of Music I (3 credit hours)
Music 1106 Elements of Music II ( 3 credit hours
Music 1120 Rudiments 1 (3 credit hours)
Music 2011 North American Popular Music (3 credit hours)
Music 2012 Understanding Classical Music (3 credit hours)
Music 2013 Twentieth-Century Musicals (3 credit hours)
Music 2014 Introduction to World Music (3 credit hours)
2. The following ensemble courses are available to non-music students with appropriate background, subject to the approval of the instructor:
Music 2611 Festival Choir (1 credit hour per semester)
Music 2614 Concert Band (1 credit hour per semester)
3. Non-Music students may also audition to participate in the following ensemble courses:

Music 2612 Chamber Choir ( 1 credit hour per semester)
Music 2613 Chamber Orchestra (1 credit hour per semester)
Music 2615 Jazz Ensemble ( 1 credit hour per semester) Music 2616 Opera Workshop (1 credit hour per semester) Music 2617 Opera Workshop ( 2 credit hours per semester) Music 2619 Wind Ensemble ( 1 credit hour per semester) Music 263A/B Chamber Orchestra ( 1 credit hour per two semesters) Music 265A/B Jazz Ensemble (1 credit hour per two semesters) Contact the School of Music office for further information regarding the audition process.
4. Most courses in musicologies (course numbers with second digit " 0 ") and music theory/composition (course numbers with second digit "1") are available to non-music Majors who have fulfilled the prerequisites.

## 13 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the School.
All courses in the School of Music are designated by the abbreviation MUS.

### 13.1 Applied Music Courses

140A/B Principal Applied Study I requires one hour per week of individual instruction (vocal or instrumental).
AR: attendance is required at School of Music recitals
$\mathrm{CH}: 4$
CO: in each semester for students whose applied study is voice, piano, organ or guitar: one of MUS 2611, 2612 and in each semester for all other applied studies: one of MUS 2611 or 2612, and one of MUS 2613, 2614, 2615, 2619, 2620
OR: one hour per week of individual instruction
PR: admission to the Bachelor of Music Degree program
1700 Introduction to Music Technology provides a practical introduction to useful computer tools for musicians, such as music notation software, basic digital audio editing, and new media.
CH: 1
CO: MUS 140A/B
LC: 1
PR: admission to the Bachelor of Music Degree program
2401 Functional Keyboard I is an introduction to practical keyboard skills for students whose Principal Applied Study is not piano or organ. Functional accompaniment, transposition and score reading are emphasized.
$\mathrm{CH}: 0$
CR: the former MUS 1127
LC: 1
PR: MUS 1108, successful completion of the Piano Proficiency Test, and admission to the Bachelor of Music Degree program
UL: may not be taken for credit by students whose Principal Applied Study is a keyboard instrument.

2402 Functional Keyboard II is a continuation of MUS 2401
CH: 1
CR: the former MUS 1128
LC. 1
PR: MUS 2401 and admission to the Bachelor of Music Degree program
UL: may not be taken for credit by students whose Principal Applied Study is a keyboard instrument.

240A/B Principal Applied Study II is a continuation of MUS 140A/B.
AR: attendance is required at School of Music recitals
CH: 4
CO: one of MUS 2611-2620 in accordance with Ensemble II under the Core Program
OR: one hour per week of individual instruction
PR: MUS 140A/B and admission to the Bachelor of Music Degree program
2411 Advanced Functional Keyboard I is an introduction to practical keyboard skills for students whose Principal Applied Study is piano or organ. Functional accompaniment, transposition and score reading are emphasized.
$\mathrm{CH}: 0$
CR: the former MUS 1137
LC: 1
PR: MUS 1108, permission of the instructor for students whose Principal Applied Study is not a keyboard instrument, and admission to the Bachelor of Music Degree program
2412 Advanced Functional Keyboard II is a continuation of MUS 2411.
CH: 1
CR: the former MUS 1138
LC: 1
PR: MUS 2411, permission of the instructor for students whose Principal
Applied Study is not a keyboard instrument, and admission to the Bachelor of Music Degree program
2611 Festival Choir requires three hours rehearsal per week.
$A R$ : attendance is required
CH: 1
PR: approval of the instructor
UL: may only obtain a maximum of 10 credit hours; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2612 Chamber Choir requires three hours rehearsal per week.

[^22]AR: attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 8 credit hours; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2613 Chamber Orchestra requires three hours rehearsal per week
AR: attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 8 credit hours; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2614 Concert Band - inactive course.
2615 Jazz Ensemble requires three hours rehearsal per week.
$A R$ : attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 8 credit hours; available for credit only to students who successfully audition for participation in the ensemble; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2616 Opera Workshop requires three hours rehearsal per week.
AR: attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 8 credit hours; available for credit only to students who successfully audition for participation in the ensemble; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2617 Opera Workshop requires six hours rehearsal per week.
AR: attendance is required
CH: 2
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 16 credit hours; available for credit only to students who successfully audition for participation in the ensemble; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.
2619 Wind Ensemble requires three hours rehearsal per week.
AR: attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition
UL: may only obtain a maximum of 8 credits in 2619 of a combination of 2614 and 2619; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2620 Instrumental Ensemble requires three hours rehearsal per week. AR: attendance is required
CH: 1
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 8 credit hours
263A/B Chamber Orchestra requires 15 hours of rehearsal per semester.
$A R$ : attendance is required
CH: 1 credit hour per two semesters
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 4 credit hours; available for credit only to students who successfully audition for participation in the ensemble; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

265A/B Jazz Ensemble requires 15 hours of rehearsal per semester.
$A R$ : attendance is required
CH: 1 credit hour per two semesters
PR: an audition. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.
UL: may only obtain a maximum of 4 credit hours; available for credit only to students who successfully audition for participation in the ensemble; not applicable as an elective under the Bachelor of Arts program; students in the Faculty of Education should consult the Office of Undergraduate Programs in the Faculty of Education regarding applicability of this course to their education degree program.

2700 Lyric Diction I is a study of English, German, French and Italian Iyric diction. The International Phonetic Alphabet will be introduced and applied to singing in these four languages.
CH: 1
LC: 1
PR: open only to students whose Principal Applied Study is Voice and admission to the Bachelor of Music Degree program
2701 Lyric Diction II is a continuation of MUS 2700.
CH: 1
LC: 1
PR: MUS 2700; open only to students whose Principal Applied Study is Voice and admission to the Bachelor of Music Degree program
3401 Functional Keyboard III is continuation of MUS 2402. Emphasis is on
functional keyboard skills for classroom music teachers.
CH: 0
CR: the former MUS 2127
LC: 1
PR: MUS 2402 and admission to the Bachelor of Music Degree program
UL: may not be taken for credit by students whose Principal Applied Study is a keyboard instrument
3402 Functional Keyboard IV is a continuation of MUS 3401.
CH: 1
CR: the former MUS 2128
LC: 1
PR: MUS 3401 and admission to the Bachelor of Music Degree program
UL: may not be taken for credit by students whose Principal Applied Study is a keyboard instrument

340A/B Principal Applied Study III is a continuation of MUS 240A/B for
students whose Major is other than Performance.
AR: attendance is required at School of Music recitals
$\mathrm{CH}: 4$
CO: one of MUS 2611-2620 in accordance with Ensemble II under the Core Program
CR: MU'S 345A/B
OR: one hour per week of individual instruction
PR: MUS 240A/B, successful completion of MUS 1006, 1108, 1118, and admission to the Bachelor of Music Degree program

3411 Advanced Functional Keyboard III is a continuation of MUS 2412.
Emphasis is on functional keyboard skills for classroom music teachers.
CH: 0
CR: the former MUS 2137
LC: 1
PR: MUS 2412, permission of the instructor for students whose Principal Applied Study is not a keyboard instrument, and admission to the Bachelor of Music Degree program

3412 Advanced Functional Keyboard IV is a continuation of MUS 3411. CH: 1
CR: the former MUS 2138
LC: 1
PR: MUS 3411, permission of the instructor for students whose Principal Applied Study is not a keyboard instrument, and admission to the Bachelor of Music Degree program

345A/B Principal Applied Study III - Performance is a continuation of MUS 240A/B. A more intensive approach to performance than in MUS 340A/ B. Students are required to present a public recital consisting of 25 to 35 minutes of music. The passing grade is $50 \%$, but a minimum final grade of $75 \%$ in both the course and the recital is required as a prerequisite for Music 445A and for continuance in the Performance Major.
AR: attendance is required at School of Music recitals
CH: 6
CO: one of MUS 2611-2620 in accordance with Ensemble II under the Core Program
CR: MUS 340A/B
OR: one hour per week of individual instruction
PR: MUS 240A/B, successful completion of MUS 1006, 1108, and 1118, and admission to the Bachelor of Music Degree program; open only to Performance Majors

3500 Chamber Music Seminar is an introduction to principles and practices in chamber music performance with an overview of repertoire research methods.
$\overline{\mathrm{AR}=\text { Attendance requirement; } \mathrm{CH}=\text { Credit hours are } 3 \text { unless otherwise noted; } \mathrm{CO}=\mathrm{Co} \text {-requisite(s); } \mathrm{CR}=\mathrm{Credit} \text { can be retained for only one }}$ course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

AR: attendance is required
CH: 1
CO: first registration in MUS 3511 or 3512
CR: the former MUS 3510
PR: an audition and admission to the Bachelor of Music Degree program. Contact the instructor or the School of Music office before the beginning of the semester regarding the audition.

3511 Chamber Music requires the ensemble to prepare and perform a recital of 10-15 minutes of music. Each ensemble receives six hours of coaching in preparation for the performance.
AR: attendance is required at all coachings and masterclasses
CH: 1 per semester
CO: MUS 3500 for first registration in MUS 3511 or 3512
PR: permission of the instructor and admission to the Bachelor of Music Degree program; repertoire to be performed must be approved prior to registration
UL: may only obtain a maximum of 8 credit hours
3512 Chamber Music requires the ensemble to prepare and perform a recital of 18-22 minutes of music. Each ensemble receives nine hours of coaching in preparation for the performance.
AR: attendance is required at all coachings and masterclasses
CH: 2 per semester
CO: MUS 3500 for first registration in MUS 3511 or 3512
PR: permission of the instructor and admission to the Bachelor of Music Degree program; repertoire to be performed must be approved prior to registration
UL: may only obtain a maximum of 12 credit hours
3513 Chamber Music requires the ensemble to prepare and perform a recital of 25-30 minutes of music. Each ensemble receives twelve hours of coaching in preparation for the performance.
AR: attendance is required at all coachings and masterclasses
CH: 3 per semester
PR: permission of the instructor and admission to the Bachelor of Music Degree program; repertoire to be performed must be approved prior to registration
UL: may only obtain a maximum of 18 credit hours
3514 Small Ensemble is a conducted ensemble requiring two hours per week of rehearsal.
CH: 1 per semester
PR: permission of the Dean and admission to the Bachelor of Music
Degree program
UL: may only obtain a maximum of 6 credit hours
3515 Accompaniment requires the students to meet for one hour per week in a masterclass. Coaching will be given to prepare for performance of a 15to 20 -minute program with a singer or instrumentalist.
AR: attendance is required
CH: 1 per semester
PR: admission to the Bachelor of Music Degree program; open only to students whose Principal Applied Study is a keyboard instrument; others by permission of the Dean; repertoire to be performed must be approved prior to registration
UL: may only obtain a maximum of 4 credit hours
3516 Accompaniment requires students to meet for one hour per week in masterclass. Coaching will be given to prepare for performance of a h
hour program with a singer or instrumentalist.
AR: attendance is required
$\mathrm{CH}: 2$ per semester
PR: admission to the Bachelor of Music Degree program; open only to students whose Principal Applied Study is a keyboard instrument; others by permission of the Dean; repertoire to be performed must be approved prior to registration
UL: may only obtain a maximum of 8 credit hours
3517 World Music Ensemble is a coached activity exploring one or more world music repertoires. This ensemble requires 2 hours of rehearsal per week.
AR: attendance is required
CH : 1 per semester
PR: admission to the Bachelor of Mușic Degree program
UL: may only obtain a maximum of 6 credit hours
3518 Contemporary Music/Improvisation Ensemble is a coached activity exploring improvisation and/or contemporary repertoire for mixed ensembles. This ensemble requires 2 hours of rehearsal per week.
AR: attendance is required
CH: 1 per semester
PR: admission to the Bachelor of Music Degree program
UL: may only obtain a maximum of 6 credit hours
3605 Music Theatre Workshop - inactive course.
3704 Career Skills for Musicians is an exploration of careers in music. Topics may include preparation of CVs, resumes, cover letters, business plans, grant applications, web sites, press kits and other promotional
materials, tax, legal and business issues in the arts; and the study of successful arts enterprises.
CR: the former MUS 3703
PR: MUS 140B and admission to the Bachelor of Music Degree program
3711 Jazz Styles and Improvisation is an applied course for singers and instrumentalists, which aims to integrate the theory and practice of jazz. Jazz styles and improvisation will be explored through listening (recordings and live performance), imitation, and improvisation of selected jazz standards.
PR: MUS 240B or permission of the instructor, and admission to the Bachelor of Music Degree program

3712 Improvisation - inactive course.
3722 Brass Seminar - inactive course.
3732 Woodwind Seminar - inactive course.
3742 String Seminar - inactive course.
3751 Studio Pedagogy is designed to provide students with a basic knowledge of resources and pedagogical approaches used in studio teaching at various levels. May include guest masterclasses and lectures.
CO: MUS 140B or permission of the instructor
CR: the former MUS 3773
PR: MUS 140B or permission of the instructor, and admission to the Bachelor of Music Degree program

3764 Vocal Pedagogy provides a thorough study of the anatomy. physiology and acoustics of the vocal tract and singing voice as well as a practical application of these topics.
CR: the former MUS 3761, 3762, 3763
PR: Music 140B in voice, and admission to the Bachelor of Music Degree program
3774 Piano Pedagogy is designed to provide students with a basic knowledge of resources and pedagogical approaches used in piano studio teaching at various levels. May include guest masterclasses and lectures.
CO: MUS 140B or permission of the instructor
CR: the former MUS 3772
PR: MUS 140B or permission of the instructor, and admission to the Bachelor of Music Degree program
440A/B Principal Applied Study IV is a continuation of MUS 340A/B.
AR: attendance is required at School of Music recitals
CH: 4
CO: one of MUS 2611-2620 in accordance with Ensemble II listed under the Core Program
CR: MUS 445A/B
OR: one hour per week of individual instruction
PR: MUS 340A/B, successful completion of MUS 2006, 2108, and 2118, and admission to the Bachelor of Music Degree program

445A/B Principal Applied Study IV - Performance is a continuation of MUS 345A/B. Students are required to present a public recital consisting of 50 to 60 minutes of music with program notes. The passing grade is $50 \%$,
but a minimum final grade of $75 \%$ in both the course and the recital is required for graduation with a Major in Performance.
AR: attendance is required at School of Music recitals
CH: 6
CO: one of MUS 2611-2620 in accordance with Ensemble II listed under the Core Program
CR: MUS 440A/B
OR: one hour per week of individual instruction
PR: MUS 345A/B with a minimum grade of $75 \%$, successful completion of MUS 2006, 2108, and 2118 and admission to the Bachelor of Music Degree program; open only to Performance Majors

4503 Special Topics in Applied Music will have topics to be studied announced by the School of Music.
CH: 1 per semester
PR: admission to the Bachelor of Music Degree program
UL: may only obtain a maximum of 3 credit hours
4504 Special Topics in Applied Music will have topics to be studied announced by the School of Music.
CH: 2 per semester
PR: admission to the Bachelor of Music Degree program
UL: may only obtain a maximum of 4 credit hours
4505 Special Topics in Applied Music will have topics to be studied announced by the School of Music.
CH: 3 per semester
PR: admission to the Bachelor of Music Degree program
UL: may only obtain a maximum of 6 credit hours
4701 Music in the Community allows students to explore the role of the artist in the community by planning and carrying out a community musicmaking project. Students will be required to propose a viable collaborative project prior to registering.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=\mathrm{Prerequisite(s);}$ UL = Usage limitation(s).

CH: 1
PR: MUS 3704 or the former MUS 3703, permission of the Dean, and admission to the Bachelor of Music Degree program

4702 Music in the Community allows students to explore the role of the artist in the community by planning and carrying out a community musicmaking project. Students will be required to propose a viable collaborative project prior to registering.
CH: 2
PR: MUS 3704 or the former MUS 3703, permission of the Dean, and admission to the Bachelor of Music Degree program
4703 Music in the Community allows students to explore the role of the artist in the community by planning and carrying out a community musicmaking project. Students will be required to propose a viable collaborative project prior to registering.
PR: MUS 3704 or the former MUS 3703, permission of the Dean, and admission to the Bachelor of Music Degree program

4800 Music Business in Practice allows students to develop and explore business pathways and opportunities in the music industry through project based, experiential learning. The course is structured around applied projects where students explore one or more of the following in practice: entrepreneurship, social enterprise, music industry internship, volunteer opportunities. In addition to applied project work, students meet in seminar format to share and deepen their learning.
CO: Business 7002
PR: admission to the Joint Degrees of Bachelor of Music and Bachelor of Business Administration program

### 13.2 Ensemble Techniques Courses

All courses in ensemble techniques are available only to candidates for the degree of Bachelor of Music except where specified.
3221 Brass Techniques I meets one hour per week. Practical study, in a class situation, of the basic techniques of playing brass instruments. CH: 1

3222 Brass Techniques II meets one hour per week. A continuation of MUS 3221. Students whose Principal Applied Study is a brass instrument must have the permission of the instructor to take this course. CH: 1

3231 Flute Techniques meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the flute.
CH: 1
UL: may not be taken for credit by students whose Principal Applied Study is flute.

3232 Single Reed Techniques meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the clarinet and/or saxophone.
CH: 1
PR: permission of the instructor for students whose Principal Applied Study is clarinet or saxophone.
3233 Double Reed Techniques meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the oboe and/or bassoon.

CH: 1
PR: permission of the instructor for students whose Principal Applied Study is oboe or bassoon.

3241 Upper String Techniques meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the violin and viola.
CH: 1
UL: may not be taken for credit by students whose Principal Applied Study is violin or viola

3242 Lower String Techniques meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the cello and string bass.
CH: 1
PR: permission of the instructor for students whose Principal Applied Study is cello or string bass.
3261 Guitar Techniques meets one hour per week. Practical study, in a
class situation, of the basic techniques of playing the guitar.
$\mathrm{CH}: 1$
UL: may not be taken for credit by students whose Principal Applied Study is guitar
3271 Organ Techniques - inactive course.
3272 Harpsichord Techniques - inactive course.
3281 Percussion Techniques I meets one hour per week. Practical study, in a class situation, of the basic techniques of playing percussion
instruments.
CH: 1
UL: may not be taken for credit by students whose Principal Applied Study is percussion.

3282 Percussion Techniques II meets one hour per week and is a continuation of MUS 3281.
CH: 1
PR: MUS 3281
UL: may not be taken for credit by students whose Principal Applied Study is percussion.
3300 Introduction to Ensemble Leadership is an introductory course on ensemble leadership in both choral and instrumental settings. Beginning with an overview of leadership concepts and theories, the course helps students situate themselves within the variety of approaches to organisational leadership, helping them develop conceptual and practical understanding of leadership in their own musical lives. The course then moves to the application of leadership in both choral and instrumental contexts with an emphasis on the development of practical and artistic elements, including but not limited to: conducting techniques, rehearsal techniques, applied aural skills, score study, musical interpretation.
AR: attendance is required
CR: the former MUS 3311, 3312, 3313, 3314
PR: MUS 240B
3301 Introduction to Ensemble Leadership is continuation of MUS 3300, with further emphasis placed on reflexive leadership development, and practical and artistic development in ensemble leadership settings, including but not limited to: conducting techniques, rehearsal techniques, applied aural skills, score study, musical interpretation.
$A R$ : attendance is required
PR: Music 3301

### 13.3 Music Theory and Composition Courses

1105 Elements of Music I is an introductory music theory and aural skills course focusing on reading, writing, and hearing basic and intermediate music rudiments that are associated with common practice Western art music. Topics include: pitch and rhythm, intervals, scales, chords, keys, time signatures, and musical terms. Emphasis will be placed on the aural comprehension of all pertinent topics.
CR: MUS 1120
1106 Elements of Music II is a continuation of Elements of Music I. This course will focus on advanced rudiments and basic harmony with an emphasis on the aural comprehension of all pertinent topics.
CR: MUS 1120
PR: MUS 1105 or permission of the instructor
1107 Materials and Techniques of Music $I$ is the study of the basic materials of tonal music; introduction to melody writing and phrase structures; introduction to voice leading with emphasis on chorale style; analysis and composition of smaller formal elements.
CO: MUS 1117
CR: the former MUS 110A, the former MUS 1113
PR: MUS 1106 or successful completion of the Theory Placement Test
1108 Materials and Techniques of Music II is a continuation of MUS 1107. Harmonic vocabulary is expanded to include all diatonic triads and seventh chords, with an introduction to chromatic harmony; phrase expansions and contractions; analysis and composition of binary and ternary forms.
CR: the former MUS 110B, the former MUS 1114
PR: MUS 1107
1117 Aural Skills I is a course on sightsinging and dictation.
CH: 1
CO: MUS 1107
LC: 2
PR: MUS 1106 or successful completion of the Theory Placement Test
1118 Aural Skills II is a continuation of MUS 1117.
CH: 1
LC: 2
PR: MUS 1107, 1117
1120 Rudiments I is an introductory course in music rudiments and theory, including basic aural skills.
CR: MUS 1105, 1106
UL: not applicable to the Bachelor of Music degree.
2107 Materials and Techniques of Music III is a study of chromatic harmony with emphasis on both writing and analysis. Introduction to sonata form.
CR: the former MUS 210A, the former MUS 2113
PR: MUS 1108 and successful completion of the piano proficiency test
2108 Materials and Techniques of Music IV is a continuing study of

[^23]chromatic harmony with an emphasis on enharmonic modulation and other advanced chromatic techniques. Continued study of sonata form, rondo, sonata rondo and variation forms. Written work will include both analysis and composition exercises in the styles studied.
CR: the former MUS 210B, the former MUS 2114
PR: MUS 2107
2117 Aural Skills III is a continuation of MUS 1118.
CH: 1
LC: 2
PR: MUS 1108, 1118 and successful completion of the piano proficiency test

2118 Aural Skills IV is a continuation of MUS 2117.
CH: 1
LC: 2
PR: MUS 2107, 2117
3100 Composition I introduces students to a variety of compositional concepts such as selected post-1900 techniques, developments in rhythm and metre, texture, phrase structures, song forms, short forms, and motivic development. The emphasis will be on composing short works employing the compositional devices studied. Students planning to apply for the Major in Composition are strongly encouraged to take this course.
PR: MUS 1108
3104 Electronic Music Studio Techniques I is a course designed to give basic instruction in the theory, technique, and philosophy of electronic music composition. Students obtain the skills necessary to operate the equipment of an electronic music studio (including mixers, synthesizers, and samplers) and to use them in appropriate and creative ways. Objectives of the course are achieved through lecture, lab experiences, listening and practical application.
PR: MUS 1108
3105 Materials and Techniques of Post-Tonal Music is a study of compositional devices used in the twentieth century. Topics include minimalism, new tonality, aleatorism, atonality, set theory, serial techniques, and electronic music.
PR: MUS 2108
3106 Sixteenth-Century Counterpoint is a course combining the analytical study of 16 th-century sacred polyphony with an emphasis on the development of compositional skills in this style. Students will be required to write two- and three-part counterpoint exercises and a motet. The principal composers studied will be Palestrina, Lassus and Victoria. Some listening and singing assignments are required.
PR: MUS 1108
3108 Eighteenth-Century Counterpoint is a study of form and polyphony in eighteenth-century music, including the fugue and the Baroque suite. Assignments include analysis, composition, and written exercises in counterpoint.
CR: the former MUS 310A, the former MUS 3113
PR: MUS 2107
3109 Jazz Theory and Arranging is an introduction to jazz theory and the principles of arranging for jazz ensembles.
PR: MUS 2108
3112 Orchestration I is an introduction to the principles of orchestration with an emphasis on instrumentation. $\downarrow$
CR: the former MUS 3102
PR: MUS 2108 or permission of the instructor
3140 Composition Seminar provides intensive composition study for students whose Major or Minor is Composition.
PR: MUS 2108, 2118, and admission to the Composition Major or Minor
UL: may only obtain a maximum of 6 credit hours
4104 Electronic Music Studio Techniques II is a continuation of MUS 3104.

PR: MUS 3104
4105 Special Topics in Music Theory will have topics to be studied announced by the School of Music.
CH: 1
UL: may only obtain a maximum of 3 credit hours
4106 Special Topics in Music Theory will have topics to be studied announced by the School of Music.
$\mathrm{CH}: 2$
UL: may only obtain a maximum of 4 credit hours
4107 Special Topics in Music Theory will have topics to be studied announced by the School of Music.
UL: may only obtain a maximum of 6 credit hours
4112 Orchestration II is a continuation of MUS 3112, and examines the technique of orchestration as it relates to the symphonic orchestra and other large ensembles.

CR: the former MUS 4102
PR: MUS 3112, or the former MUS 3102, or permission of the instructor.
4140 Advanced Composition Seminar provides advanced composition study for students whose Major or Minor is Composition. Students will prepare a recital of original works and/or a portfolio of their compositions.
PR: 6 credit hours of MUS 3140, and admission to the Composition Major
UL: may only obtain a maximum of 6 credit hours

### 13.4 Musicologies Courses

1005 Thinking and Writing About Music I is designed to develop listening, critical thinking, research and writing skills through selected cross-cultural topics and themes exploring the relationship between music and society. The course will introduce the student to the terminology of music history and the concepts of genre, musical style and style periods. This course has strong listening and writing components.
CR: MUS 2012, the former MUS 1002
PR: MUS 1120 or MUS 1106 or successful completion of theory placement test or admission to the Bachelor of Music degree program. The ability to read music is required.
1006 Thinking and Writing about Music II s a continuation of MUS 1005. PR: MUS 1005

2005 History of Western Art Music I is an intensive survey, through selected compositions, of the development of musical style to 1700 . This course has strong listening and writing components and continues to develop research skills.
CO: MUS 1107
CR: the former MUS 1003
PR: MUS 1006
2006 History of Western Art Music II is a continuation of MUS 2005. An intensive survey, through selected compositions, of the development of musical styles in the Western world from 1700 to 1900. This course has strong listening and writing components and continues to develop research skills.

## CR: the former MUS 2002

PR: MUS 2005
2011 North American Popular Music examines the development of North American popular music from its origins in the mid-nineteenth century to the present. The course examines major musical genres, their historical roots, their musical characteristics, the influences that shaped them and the artists who defined them. It explores sociopolitical issues embedded in popular music, as well as how music has evolved to express new conceptions of self and community, social anxieties, tensions and ideals. No prior musical knowledge is required.
UL: not applicable to the Bachelor of Music Degree
2012 Understanding Classical Music: Introduction Through Guided Listening is a course designed to enhance and develop listening skills and an understanding of the basic elements of music. Form and musical style in Western classical music will be explored within a cultural and historical context. Through guided listening, the student will be exposed to a variety of mûsical styles and traditions. This course has a strong listening component. The ability to read music is not required.
CR: MUS 1005, 1006, 2005, 2006 or the former MUS 1000, 1001,
$1002,1003,1010,1020$ or 1021
UL: not applicable to the Bachelor of Music Degree.
2013 Twentieth-Century Musicals (same as English 2013) is a survey of twentieth-century musical theatre. Selected works, presenting different styles and periods, will be examined in detail. There will be a strong, required listening/viewing component to this course. The ability to read music is not required.
CR: MUS 3007, English 2013
UL: not applicable to the Bachelor of Music Degree.
2014 Introduction to World Music provides an introduction to the musics of selected cultures and contemporary intercultural communities. Drawing on topics and issues in ethnomusicology, it focuses on musical practices, beliefs, and techniques. It is intended to develop listening skills, broaden musical horizons, as well as to enable a deeper understanding of the way music functions in relation to social groups and individual lives.
UL: not applicable to the Bachelor of Music Degree.
2021 Newfoundland and Labrador Folksinging is an introduction to the sociocultural contexts, functions, and meanings of folksong in Newfoundland and Labrador. Proceeding from this contextual base drawn from oral and scholarly histories, the course offers practical instruction by a traditionbearer in the singing of traditional Newfoundland and Labrador tunes and texts, using the techniques of aural transmission and assisted by the written medium where appropriate.
UL: no more than 3 credit hours from the 2021-2023 series may be applied toward the Bachelor of Music Degree

2022 Newfoundland and Labrador Fiddling is an introduction to the
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
sociocultural contexts, functions, and meanings of fiddling in Newfoundland and Labrador. Proceeding from this contextual base drawn from oral histories, the course offers practical instruction by a tradition-bearer on the fiddle, using the techniques of aural transmission and assisted by the written medium where appropriate.
UL: no more than 3 credit hours from the 2021-2023 series may be applied toward the Bachelor of Music Degree

2023 Newfoundland and Labrador Accordion is an introduction to the sociocultural contexts, functions, and meanings of accordion music in Newfoundland and Labrador. Proceeding from this contextual base drawn from oral histories, the course offers practical instruction by a traditionbearer on the button accordion, using the techniques of aural transmission and assisted by the written medium where appropriate.
UL: no more than 3 credit hours from the 2021-2023 series may be applied toward the Bachelor of Music Degree

3004 The Development of Symphonic Music (formerly MUS 3020) is a study of the development of symphonic literature from the late Baroque era to the present day. Selected compositions, representing different periods and styles, will be examined in detail. This course has a strong listening component.
CR: the former MUS 3020
PR: MUS 2005
3005 The Development of Opera is a study of the development of opera from the beginnings to the present day. Selected operas, representing different periods and styles, will be examined in detail. This course has a strong listening component.
PR: MUS 2005
3006 The History of the Concerto is a study of the development of the concerto from the late Baroque until the present day. Selected compositions, representing different styles and periods, will be examined in detail. This course has a strong listening component.
PR: MUS 2005
3007 A History of Popular Music in Drama is a survey of popular music styles in drama from the rise of the Singspiel to the musicals of Andrew Lloyd Weber. Selected works, representing different styles and periods, will be examined in detail. This course has a strong listening component.
CR: MUS 2013, English 2013
PR: MUS 2005 or permission of the instructor
3009 Music in the Modern World is an intensive study of music in the 20th and 2lst centuries. Focused themes address a wide range of genres and styles with particular attention to music's interaction with the other arts and with society. This course has strong listening and writing components and continues to develop research skills.
CR: the former MUS 2003
PR: MUS 2006
3014 World Music: Musics of Asia and Oceania is an examination of musical theory, genres, instruments, aesthetics, and functions of music in Asia and Oceania, including the classical music of the Indian subcontinent, ritual musics of East Asia, gong-chime ensembles of Southeast Asia, and traditional musics of Polynesia and Australia. This course has a strong listening component.
PR: MUS 1120 with a minimum mark of $75 \%$ or MUS 1106 or equivalent and completion of at least 24 credit hours of university course work.
3015 World Music: Music of Africa and the Americas is an examination of musical theory, genres, instruments, aesthetics, and functions of music in Africa and the Americas, including traditional African musics, neo-African musics of the Americas, Native American musics, and traditional South American musics. This course has a strong listening component.
PR: MUS 1120 with a minimum mark of $75 \%$ or MUS 1106 or equivalent and completion of at least 24 credit hours of university course work

3016 Canadian Musical Traditions is a survey of musical streams in Canadian music history from colonial times to the present, including indigenous and transplanted musical traditions, and Canadian art music. This course has a strong listening component.
PR: MUS 1120 with a minimum mark of $75 \%$ or MUS 1106 or equivalent and completion of at least 24 credit hours of university course work
3017 Music, Song and Tradition (same as Folklore 3200) introduces
students to a wide range of traditional song. Students will hear and discuss local, regional and international examples. Ability to read music or familiarity with music theory not required.
CH: 3
CR: FOLK 3200, the former FOLK 4445
3018 Jazz and Blues: The Roots of Popular Music (same as Folklore 3618) is an overview of blues and jazz as traditional musical forms. Lectures and listening will illustrate the development of regional music cultures and generic styles. To better understand the shift of blues and jazz from regional to global performance contexts, the course will examine the effects of changing transmissional media, from predominantly sensory media through contemporary media technologies. A term paper concerning musical style will entail library research and aural analysis.
CR: Folklore 3618
3019 Popular Music Studies will explore a number of genres in the historical development of world popular music and dance, along some of the following themes: the roles of race, class, gender, sexuality, age. and ability in popular music production and reception; processes and effects of mass media and technology in shaping genres and consumers' experience of them; and cross-cultural influences within and across national borders.
PR: MUS 1120 with a minimum mark of $75 \%$ or MUS 1106 or equivalent and completion of at least 24 credit hours of university course work
3060 Voice Literature and Performance Practice - inactive course.
3070 Piano Literature and Performance Practice -inactive course.
4001 The First Viennese School is a study of the music composed in the Austro-Hungarian Empire from 1770 to 1800. The works of Haydn, Mozart and the young Beethoven will be investigated with particular emphasis on musical style, performance practices and cultural context. Listening will focus on complete works or extended excerpts.
PR: MUS 2006
4002 Studies in Baroque Music is an examination of aspects of musical style and performance practices in the baroque period through the study of selected topics and specific musical examples. The course includes reading assignments, listening, score reading, and taking part in class demonstrations.

## PR: MUS 2006

4003 Special Topics in Musicologies will be announced by the School of Music.
$\mathrm{CH}: 1$ per semester
UL: may only obtain a maximum of 3 credit hours
4004 Special Topics in Musicologies will be announced by the School of Music.
$\mathrm{CH}: 2$ per semester
UL: may only obtain a maximum of 4 credit hours
4005 Special Topics in Musicologies will be announced by the School of Music.

## UL: may only obtain a maximum of 6 credit hours

4040 Music and Culture (same as Folklore 4440, the former Anthropology 4440, the former MUS 4440) examines traditional music as an aspect of human behaviour in Western and non-European cultures. Examination of the functions and uses of music; folk- popular-art music distinctions; and the relation of style to content. Outside reading, class exercises and individual reports will be required.
CR: Folklore 4440, the former Anthropology 4440, the former MUS 4440
PR: completion of at least 24 credit hours of university course work
UL: not applicable towards the Major or Minor in Anthropology
4095 Graduating Essay is directed study which will result in the production of an original paper dealing with a topic in musicologies (including but not limited to music history, ethnomusicology, and popular music studies). This course is restricted to Musicologies Majors. A one-page research proposal and sample bibliography of at least ten items must be submitted to the Dean by the end of the seventh week of classes in the previous semester.
PR: admission to the Musicologies Major



## FACULTY OF NURSING

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www.mun.ca/nursing
Dean
Gaudine, A., B.Sc.(Hons.) Mount Allison, M.Sc. (A) McGill, Ph.D. Concordia; Professor
Up-to-date personnel listings for the Faculty of Nursing are available at www.mun.ca/nursing/about_us/people.
Directors, Bachelor of Nursing (Collaborative) Sites
Manuel, M., B.N. Memorial, M.N. Athabasca; Western Regional School of Nursing
Watkins, K., B.N., M.N., Ph.D. Memorial; Centre for Nursing Studies
Up-to-date personnel listings for the Centre for Nursing Studies are available at www.cns.nf.ca/about_us.
Up-to-date personnel listings for Western Regional School of Nursing are available at www.grenfell.mun.ca/campus-
services/Pages/Directory.aspx.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Faculty Description

The Memorial University of Newfoundland Faculty of Nursing is a provincial and national leader in nursing education and research and an advocate for the formulation and realization of health public policy. The Faculty was founded as Memorial University of Newfoundland School of Nursing in 1965 and in 1966 the first 38 students were admitted to the Bachelor of Nursing (BN) program. In the Fall of 2019 the School of Nursing became a Faculty of Nursing.
Today the Faculty of Nursing has grown to over 500 students enrolled across a variety of undergraduate and graduate programs. The Bachelor of Nursing (Collaborative) (B.N.) program (4-year option and 3 -year accelerated options) in collaboration with the Centre for Nursing Studies and Western Regional Faculty of Nursing, is an on-campus undergraduate degree program to prepare entry-level nurses for practice. Graduate programs include a Master of Nursing (M.N.) with practicum and nurse practitioner options, the PostMaster's Nurse Practitioner Graduate Diploma in Nursing, and a Doctor of Philosophy (Ph.D.) in Nursing. Information regarding graduate programs in Nursing is available in the School of Graduate Studies section of the University Calendar.
Nursing is one of today's most challenging and rewarding careers. As the largest group of health care professionals in Canada, nurses play a vital role in the health care system, practicing as care-givers, teachers, counselors, advocates, and coordinators of care. Nurses work to promote health and prevent illness in a variety of settings including community health clinics, rehabilitation centers, long-term care facilities, hospitals, schools, industrial workplaces, and rural northern nursing stations.
Students must meet all regulations of the Faculty in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS. Further information regarding the Faculty of Nursing is available at www.mun.ca/nursing.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Vision Statement

The Faculty of Nursing will be responsive and engaging in leading nursing education and research provincially, nationally and internationally by developing quality teaching, learning, and research environments. Graduates of the Faculty will be skillful, caring, knowledgeable nurses who have a clear vision of the nursing discipline. They will strive for excellence in health care, be prepared to collaborate with others, and be responsive to human diversity in an effort to improve health for all.

### 3.2 Mission Statement

The Faculty of Nursing provides leadership in teaching and learning in nursing, nursing research, and public engagement with the goal of promoting health and well-being.

### 3.3 Academic and Professional Ethics

The Memorial University of Newfoundland Faculty of Nursing, Centre for Nursing Studies, and Western Regional School of Nursing support the highest standards of academic and professional ethics. Ethical behaviour encompasses integrity, conduct, respect, and professionalism. It also means that students will take responsibility for their learning and pursue academic goals in an honest and engaged manner to reflect the principles, values, and expectations that are espoused as members of the Schools of Nursing and future nurse professionals.

### 3.4 Accreditation Status and Approval Status

### 3.4.1 Accreditation Status

The Faculty of Nursing's Bachelor of Nursing (Collaborative) Program is accredited to 2022 by the Canadian Association of Schools of Nursing (CASN). The seven year award achieved by this Program is the highest award given to Schools of Nursing in Canada.

### 3.4.2 Approval Status

The Faculty of Nursing's Bachelor of Nursing (Collaborative) Program is approved by the Association of Registered Nurses of Newfoundland and Labrador (ARNNL). The ARNNL approval designation assures both the public and our students that this Program prepares ethical entry-level practitioners who provide safe quality health care. This program prepares graduates to meet the requirements for licensure and professional practice as registered nurses in Newfoundland and Labrador.

## 4 Description of Program

All courses of the Faculty are designated by the abbreviation NURS.

### 4.1 Bachelor of Nursing (Collaborative) Program

The Faculty of Nursing offers an undergraduate program leading to a Bachelor of Nursing. This Program is designed to prepare competent entry-level nurses who will function within a variety of health care settings. The graduate is prepared to assume the roles of direct care giver, educator, counsellor, advocate, facilitator, co-ordinator of care, researcher, leader, and member of the nursing profession. The Program is guided by a mission, philosophy and conceptual framework which direct the curriculum as students progress toward competent entry-level nursing practice.
To meet the licensing requirements for practising nursing in Canada, students must graduate from an approved program offered by a Faculty of Nursing and successfully write the National Council Licensure Examination for Registered Nurses (NCLEX-RN). During the program, students may be required to buy resources that are endorsed by the Faculty to prepare for the exam and integrated into courses throughout the curriculum. In the final year of the Program, students must also complete a comprehensive examination set by the Bachelor of Nursing (Collaborative) Program. All costs associated with these resources and exams are the responsibility of the student.
The Bachelor of Nursing (Collaborative) Program (B.N.) has two full-time curriculum options; a 4-Year Option and a 3-year Accelerated Option. Both are guided by the same conceptual framework and leveled objectives. A two-year Fast Track Option is in its final year of delivery. The Program also has an Licensed Practical Nursing Bridging (LPN) admission option directly into the second year of the Program's 4-Year Option for prospective students who have completed a LPN program as outlined under Admission Regulations for the Faculty of Nursing.
This Bachelor of Nursing (Collaborative) Program is offered at Memorial University of Newfoundland Faculty of Nursing, the Centre for Nursing Studies, and the Western Regional School of Nursing. Information regarding Memorial University of Newfoundland Faculty of Nursing is available at www.mun.ca/nursing. Information regarding the Centre for Nursing Studies is available at www.centrefornursingstudies.ca, and information regarding the Western Regional School of Nursing is available at www.grenfell.mun.ca/ nursing.

### 4.1.1 Bachelor of Nursing (Collaborative) 4-Year Option

The 4 -Year Option is offered over nine semesters in four academic years. This option is comprised of 123 credit hours, and is open to applicants from both high school and university backgrounds. It should be noted that the Winter semester of the second and fourth years of the program extends beyond the normal University class end date in their respective semesters as outlined in the University Diary.

### 4.1.2 Bachelor of Nursing (Collaborative) Accelerated Option

The Accelerated Option is designed for students with well-developed university-level study skills and prior completion of at least 60 credit hours in university level courses. This full-time Option is comprised of 106 credit hours taken over eight consecutive semesters. This Option is offered at Memorial University of Newfoundland Faculty of Nursing and Western Regional School of Nursing.

### 4.1.3 Bachelor of Nursing (Collaborative) Fast-Track Option

The Bachelor of Nursing (Collaborative) Fast-Track Option is currently being phased out and is not available for new admissions.

### 4.2 Clinical Placements

1. The Faculty of Nursing depends on the cooperation and involvement of a large number of organizations and professional personnel in providing quality clinical placements and instruction to its students. These agencies often have a range of requirements, some of which include a Certificate of Conduct, Child Protection Record Check, immunizations, First Aid Certificate, and CPR certificate. Students unable to meet these agency requirements may be delayed in their program or prevented from completing their program of studies. All students are required to complete these requirements in a timely fashion and at their own expense. Many of these requirements must be updated annually.
2. Evidence of certification in Standard First Aid and Basic Life Support (CPR) level HCP or equivalent, offered by The Canadian Red Cross or St. John Ambulance, is required by all students prior to commencing clinical courses. Students must maintain CPR certification throughout the program. Certification obtained from other organizations will be accepted if deemed equivalent by the Faculty of Nursing.
3. Successful applicants must submit documentation of completion of all preclinical requirements prior to the beginning of classes in the Fall semester of their entrance year. Students who have outstanding preclinical requirements will not be permitted to register for the Winter semester.
4. Clinical placements may be offered in whole or in part outside the normal start and end dates of a semester.
5. In order to satisfy elinical practice requirements for the Bachelor of Nursing (Collaborative) Program, clinical agencies may be used 24 hours a day, seven days a week. Students may be required to attend during any of these times.
6. Students normally are expected to be available for clinical placements throughout the Province of Newfoundland and Labrador.
7. Clinical Placement Coordinators are responsible for facilitating appropriate matches among students, preceptors, and clinical settings. Although consideration will be given to all factors affecting the location and type of placement, clinical placements may not be available in the area of students' specific preferences. Students who refuse a placement deemed suitable may be delayed in their program or prevented from completing their program of study.
8. Completion of this program may require students to travel for clinical placements. Students are responsible for all costs associated with clinical placements including, but not limited to, preclinical requirements, travel expenses and accommodation.

## 5 Admission/Readmission Regulations for the Faculty of Nursing

The application for admission to Bachelor of Nursing (Collaborative) Program is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/ twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. Applicants requiring additional information for the Bachelor of Nursing (Collaborative) Program may visit the Nursing Admissions website at www.mun.ca/nursingadmissions.
In addition to meeting the UNIVERSITY REGULATIONS students must meet the Admission/Readmission Regulations for the Faculty of Nursing.
For information concerning Readmission refer to Readmission Regulations for the Faculty of Nursing.

### 5.1 General Information

1. Entry to the Bachelor of Nursing (Collaborative) Program is competitive for a limited number of seats. Meeting the minimum requirements for admission does not guarantee acceptance into the Program. The final decision on admission rests with the Joint Admissions Committee of the B.N.(Collaborative) Program.
2. Admission to the University does not necessarily constitute admission to the Program.
3. Selection of candidates for admission to the Bachelor of Nursing (Collaborative) Program is based primarily on academic performance to date. Relevant work and volunteer experience, references and personal statements are also considered.
4. Priority is given to applicants who are residents of Newfoundland and Labrador.
5. Up to three seats per year are reserved in the 4 -Year Option of the Bachelor of Nursing program specifically for applicants of Indigenous ancestry who have met the admission requirements, but are not in the top ranked candidates. Applicants wishing to be considered under this clause must check the appropriate space provided on the Bachelor of Nursing application form and provide documentation of Indigenous ancestry.
6. Applicants may be requested to attend an interview.
7. Bachelor of Nursing (Collaborative) Program applicants are required to submit a student information form and a complete record of current immunizations when admitted to the Program. Successful applicants must submit documentation of completion of all preclinical requirements prior to the beginning of classes in the Fall semester of their entrance year. Students who have outstanding preclinical requirements will not be permitted to register for the Winter semester.
8. Evidence of certification in Standard First Aid and Basic Life Support (CPR) level HCP, offered by The Canadian Red Cross or St. John Ambulance is required by all applicants prior to commencing clinical courses. Certification obtained from other organizations will be accepted if deemed equivalent by the Faculty of Nursing.
9. An applicant who has been denied admission to the Bachelor of Nursing (Collaborative) Program has the right to appeal this decision of the Joint Admissions Committee if it is felt by the applicant that the decision was reached on grounds other than those outlined under Admission Regulations for the Faculty of Nursing. The appeal should be made in writing within fourteen days of the notification of the decision and should be directed to the Chair of the Committee on Undergraduate Studies at the Memorial University of Newfoundland Faculty of Nursing. The letter should state clearly and fully the grounds for the appeal.

### 5.2 Application Forms and Deadlines

1. The application for admission to Bachelor of Nursing (Collaborative) Program is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/ admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. Applicants requiring additional information for the Bachelor of Nursing (Collaborative) Program may visit the Nursing Admissions website at www.mun.ca/nursingadmissions.
2. Both options of the Bachelor of Nursing (Collaborative) Program (i.e., 4 -Year Option and the Accelerated Option)) commence in the Fall semester. The deadline for application is February 1st.
3. The deadline for application to the Bachelor of Nursing (Collaborative) Program via the LPN Bridging Admission Option is February 1st.

### 5.3 Admission Regulations to Faculty Programs

These regulations apply to the Bachelor of Nûrsing (Collaborative) Program 4-Year and Accelerated Options. Applicants may apply for admission under the Categories of Applicants, Admission Criteria and Other Information outlined under UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate). In addition to meeting these regulations, applicants in the following categories, must meet the additional requirements as indicated below.

### 5.3.1 High School Applicants

Applicants from High School may apply for admission only to the 4-Year Option of the Bachelor of Nursing (Collaborative) Program. High School applicants to the 4-Year Option of the Bachelor of Nursing (Collaborative) Program must have completed a high school diploma, or its equivalent, as certified by the Department of Education of Newfoundland and Labrador and meet the general Admission/ Readmission requirements of Memorial University of Newfoundland. High school courses must include the following or their equivalents:

- Biology 2201
- Biology 3201
- Chemistry 3202
- English 3201
- Math 3200 or 3201
- Social Science or Modern Language (2 credits at 3000 level)


### 5.3.2 Memorial University of Newfoundland Applicants

Memorial University of Newfoundland applicants may apply for admission to the 4-Year Option and/or the Accelerated Option of the Bachelor of Nursing (Collaborative) Program.

1. Bachelor of Nursing (Collaborative) 4-Year Option applicants must have a high school diploma, or its equivalent, as certified by the Department of Education of Newfoundland and Labrador and be in clear academic standing at Memorial University of Newfoundland. High School courses must include:

- Biology 2201 and 3201 or their equivalents
- Chemistry 3202 or equivalent
- Math 3200 or 3201 or equivalent.

2. Bachelor of Nursing (Collaborative) Accelerated Option applicants must:

- meet the admission requirements for the Bachelor of Nursing (Collaborative) Program listed under Admission Regulations for the Faculty of Nursing
- have successfully completed a minimum 60 credit hours in university level courses. Courses must include 12 credit hours as follows:
- 6 credit hours in Critical Reading and Writing (CRW) designated courses in English
- 3 credit hours in Sociology, Anthropology, or Archaeology
- Psychology 1000 or equivalent
- have a GPA of 3.0 or higher.

The primary criterion used in reaching decisions on applications for admission to the Bachelor of Nursing (Collaborative) Accelerated Option Program is overall academic achievement to date. Relevant work and volunteer experience, references and personal statements are also considered. Since the accelerated option is full-time and continuous, the Admissions Committee will review the applicant's transcript for evidence that the applicant has the ability to complete 12 -credit hour course loads and achieve grades at least as high as those required to meet promotion requirements. Applicants whose transcripts do not demonstrate this ability or whose overall academic records are below this standard are unlikely to be admitted.

### 5.3.3 Transfer Applicants

Transfer applicants may apply for admission to any of the Faculty of Nursing Programs.
Applicants who would like to transfer from a nursing program that is offered outside of this Province should view the information at www.mun.ca/nursingadmissions/AdmissionInformation/TransferringfromAnotherNursingProgram/.

1. Bachelor of Nursing (Collaborative) Program 4-Year Option applicants must have a high school diploma, or its equivalent, as certified by the Department of Education of Newfoundland and Labrador. High School courses must include:

- Biology 2201 and 3201 or their equivalents
- Chemistry 3202 or equivalent
- Math 3200 or 3201 or equivalent.

2. Bachelor of Nursing (Collaborative) Accelerated Option applicants must:

- meet the admission requirements for the Bachelor of Nursing (Collaborative) Program listed under Admission Regulations for the Faculty of Nursing
- have successfully completed a minimum 60 credit hours in university level courses. Courses must include 12 credit hours as follows:
- 6 credit hours in Critical Reading and Writing (CRW) designated courses in English
- 3 credit hours in Sociology, Anthropology, or Archaeology
- Psychology 1000 or equivalent
- have a GPA of 3.0 or higher

The primary criterion used in reaching decisions on applications for admission to the Bachelor of Nursing (Collaborative) Accelerated Option Program is overall academic achievement. Since the accelerated option is full-time and continuous, the Admissions Committee will review the applicant's transcript for evidence that the applicant has the ability to complete 12-credit hour course loads and achieve grades at least as high as those required to meet promotion requirements. Applicants whose transcripts do not demonstrate this ability or whose overall academic records are below this standard are unlikely to be admitted.

### 5.3.4 LPN Bridging Applicants

Applicants with a Licensed Practical Nurse designation may apply for admission to the Bachelor of Nursing (Collaborative) Program through the LPN Bridging Option. This admission option recognizes the nursing knowledge and clinical experience obtained through a Practical Nursing Program and work experiences, and provides a career ladder for Licensed Practical Nurses (LPNs) who would like to obtain the Bachelor of Nursing degree.
Successful applicants must complete a Bridging semester prior to admission to the Program. The courses taken during the Bridging semester prepare LPNs to enter the second year of the 4-Year Option of the Bachelor of Nursing (Collaborative) Program.
The Bridging semester, completed during the Spring semester before admission to the Bachelor of Nursing (Collaborative) Program, is comprised of three non-nursing courses as well as a 7 -week Bridging course. Upon successful completion of the Bridging semester, LPN Bridging candidates are granted 25 unspecified transfer nursing credit hours as equivalent to the 25 credits of the Year 1 nursing courses in the Bachelor of Nursing (Collaborative) Program. If all courses of the Bridging semester are successfully completed, all nonacademic requirements for entrance into the Program are complete, and candidates remain in good standing with the University, they are accepted into Year 2 of the Bachelor of Nursing (Collaborative) Program 4-Year Option.
The LPN Bridging option is offered only at the Centre for Nursing Studies. Information regarding the Centre for Nursing Studies is available at www.centrefornursingstudies.ca.

1. The LPN Bridging semester begins in May. The deadline for application to the Program through the LPN Bridging option is February 1st. Applicants to the LPN Bridging option must submit the application to the University online for the Spring semester; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. Applicants requiring additional information for the Bachelor of Nursing (Collaborative) Program may visit the Nursing Admissions website at www.mun.ca/nursingadmissions.
2. Selection of candidates for admission to the Bachelor of Nursing (Collaborative) LPN Bridging Option is based on:

- academic performance in the practical nursing program and in any university courses taken to date;
- evidence of ability to successfully maintain a full course load; and
- other criteria considered suitable for professional practice in nursing.

3. Applicants must provide two letters of reference (one reference regarding academic performance and one from a current employer regarding clinical performance).
4. LPN Bridging option applicants may be requested to attend an interview.
5. To be considered for admission to the Bachelor of Nursing (Collaborative) Program, LPN Bridging Option applicants must:

- be licensed by the College of Licenced Practical Nurses of Newfoundland and Labrador (copy of certification required);
- meet the admission requirements for the Bachelor of Nursing (Collaborative) Program listed under Admission Regulations for the Faculty of Nursing;
- have completed the following high school courses:
- Biology 2201 and 3201 or their equivalents,
- Chemistry 3202 or equivalent,
- Math 3200 or 3201 or equivalent,

6. Admission into the second year of the Bachelor of Nursing (Collaborative) Program will be conditional and based on successful completion of the Bridging semester which includes the following:

- Bridging Course (offered only at the Centre for Nursing Studies)
- Biochemistry 1430
- 3 credit hours in a Critical Reading and Writing (CRW) designated course in Englis

7. After admission into the Bachelor of Nursing (Collaborative) Program, students complete the 69 nursing credit hours and 27 nonnursing credit hours of Years 2 through 4 of the 4 -Year Option as part of the $4-Y$ ear Option cohort. The courses are recommended to be taken in the academic terms in the sequence as set out in Table 2, Bachelor of Nursing (Collaborative) Program - Centre For Nursing Studies (CNS), (Academic Terms 3-9).

### 5.4 Readmission Regulations for the Faculty of Nursing

1. A student who was enrolled in the Bachelor of Nursing (Collaborative) Program, withdrew after the conclusion of the first semester, and wishes to return to the Program must apply for readmission. The application must be directed to the Chair, Committee on Undergraduate Studies at the School of original admission.
2. An applicant must submit a completed Application for Readmission to the Nursing Program by March 1 for Fall readmission and October 1 for Winter or Spring readmission. Applicants for readmission should follow the application instructions at www.mun.ca/nursing/undergraduates/re-admissiontoBNprogram.php
3. Readmission to the University does not necessarily constitute readmission to the Program.


## 6 Program Regulations

All courses of the Faculty are designated by NURS.

### 6.1 Bachelor of Nursing (Collaborative) Program 4-Year Option

- The 123 credit hour Bachelor of Nursing (Collaborative) Program 4-Year Option requires 96 NURS credit hours and 27 non-NURS credit hours.
- The 123 credit hours are recommended to be taken in the academic terms in the sequence as set out in Table 1, 2, or $\mathbf{3}$ Bachelor of Nursing (Collaborative) Program 4-Year Option.
- These courses will be offered during the same year at all sites, but the semester of course offering may vary with each site.
- Clinical course hours may occur at any time during the semester. Clinical courses may be offered in whole or in part outside the normal start and end dates of a semester.

Table 1 Bachelor of Nursing (Collaborative) Program 4-Year Option - Memorial University of Newfoundland Faculty of Nursing

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Fall <br> Year 1 <br> Academic Term1 | Biochemistry 1430 <br> 3 credit hours in a Critical Reading and Writing (CRW) designated course in English <br> NURS 1002 <br> NURS 1003 <br> NURS 1004 <br> NURS 1017 | 3 credit hours in total chosen from any academic unit must be completed in any Academic Term or during a Spring semester. |
| Winter <br> Year 1 Academic Term 2 | NURS 1012 <br> NURS 1014 <br> NURS 1015 <br> NURS 1016 <br> NURS 1520 |  |
| Fall <br> Year 2 <br> Academic Term 3 | NURS 2002 <br> NURS 2003 <br> NURS 2004 <br> NURS 2502 <br> Psychology 1000 |  |
| Winter <br> Year 2 <br> Academic Term 4 | Biology 3053 <br> 3 credit hours in a Gritical Reading and Writing (CRW) designated course in English <br> NURS 2015 <br> NURS 2515 <br> NURS 2520 <br> Statistics 1510 or 2500 or equivalent, or Education 2900 |  |
| Fall <br> Year 3 <br> Academic Term 5 | NURS 3015 <br> NURS 3104 <br> NURS 3113 <br> NURS 3515 <br> 3 credit hours chosen from Philosophy, or Religious Studies 2610 |  |
| Winter <br> Year 3 <br> Academic Term 6 | NURS 3000 <br> NURS 3001 <br> NURS 3500 <br> NURS 3501 <br> 3 credit hours in any one of Anthropology, Archaeology, or Sociology |  |
| Spring <br> Year 3 <br> Academic Term 7 | NURS 3523 <br> NURS 4512 (in Academic Term 7 or 8) |  |
| Fall <br> Year 4 <br> Academic Term 8 | NURS 4100 <br> NURS 4103 <br> NURS 4512 (in Academic Term 7 or 8) |  |
| Winter <br> Year 4 <br> Academic Term 9 | NURS 4516 |  |

Table 2 Bachelor of Nursing (Collaborative) Program 4-Year Option - Centre for Nursing Studies (CNS)


Table 3 Bachelor of Nursing (Collaborative) Program 4-Year Option - Western Regional School of Nursing (WRSON)

| Term | Required Courses | Elective Courses |
| :---: | :---: | :---: |
| Fall Year 1 Academic Term1 | Biochemistry 1430 <br> 3 credit hours in a Critical Reading and Writing (CRW) designated course in English <br> NURS 1002 <br> NURS 1003 <br> NURS 1004 <br> NURS 1017 | 3 credit hours in total chosen from any academic unit must be completed in any Academic Term or during a Spring semester. |
| Winter <br> Year 1 <br> Academic Term 2 | NURS 1012 <br> NURS 1014 <br> NURS 1015 <br> NURS 1016 <br> NURS 1520 |  |
| Fall <br> Year 2 <br> Academic Term 3 | NURS 2002 <br> NURS 2003 <br> NURS 2004 <br> NURS 2502 <br> Psychology 1000 |  |
| Winter <br> Year 2 <br> Academic Term 4 | Biology 3053 <br> 3 credit hours in a Critical Reading and Writing (CRW) designated course in English <br> NURS 2015 <br> NURS 2515 <br> NURS 2520 <br> Statistics 1510 or 2500 or equivalent, or Education 2900 |  |
| Fall <br> Year 3 <br> Academic Term 5 | NURS 3015 <br> NURS 3104 <br> NURS 3113 <br> NURS 3515 <br> 3 credit hours chosen from Philosophy, or Religious Studies 2610 |  |
| Winter Year 3 Academic Term 6 | NURS 3000 <br> NURS 3001 <br> NURS 3500 <br> NURS 3501 <br> 3 credit hours in any one of Anthropology, Archaeology, or Sociology | $1$ |
| Spring <br> Year 3 <br> Academic Term 7 | NURS 3523 <br> NURS 4512 (in Academic Term 7 or 8) |  |
| Fall <br> Year 4 <br> Academic Term 8 | NURS 4100 <br> NURS 4103 <br> NURS 4512 (in Academic Term 7 or 8) |  |
| Winter <br> Year 4 <br> Academic Term 9 | NURS 4516 |  |

### 6.2 Bachelor of Nursing (Collaborative) Accelerated Option

- The Bachelor of Nursing (Collaborative) Accelerated Option is offered at Memorial University of Newfoundland Faculty of Nursing and the Western Regional School of Nursing.
- The 106 credit hours must be taken in the academic terms as set out in Table 4 and Table 5 Bachelor of Nursing (Collaborative) Accelerated Option.
- Courses in the Spring semesters run over two six week time periods.
- Clinical course hours may occur at any time during the semester. Clinical courses may be offered in whole or in part outside the normal start and end dates of a semester.

Table 4 Bachelor of Nursing (Collaborative) Accelerated Option - Memorial University of Newfoundland Faculty of Nursing


Faculty of Nursing 2019-2020
Table 5 Bachelor of Nursing (Collaborative) Accelerated Option - Western Regional School of Nursing (WRSON)


## 7 Promotion Regulations

1. The Memorial University of Newfoundland Faculty of Nursing constitutes the examining body for all School of Nursing examinations. The standing of every student will be assessed at the end of each academic semester, and a grade report will be issued by the University Registrar to the individual student.
2. Students are required to achieve a grade of at least $65 \%$ or a grade of PAS as appropriate in each of the required nursing courses.
3. All prior clinical courses must be successfully completed in order to progress to each clinical course in the program sequence.
4. After the course has begun, a student is not permitted to drop a clinical course without the written permission of the Dean/Director or delegate.
5. Except in the Bachelor of Nursing (Collaborative) Fast-Track Option, a student failing to achieve the requirements outlined above is permitted to repeat the given nursing course only once. A second failure in a given nursing course will result in withdrawal from the program.
6. A student in the Bachelor of Nursing (Collaborative) Fast-Track or Accelerated Options who fails a course is required to withdraw from the Option. This student may be permitted, with special permission from the Dean/Directors, to resume studies within the 4 Year Option of the Bachelor of Nursing (Collaborative) Program and is subject to all its academic standards and requirements. Accordingly, a failed course in the Fast-Track or Accelerated Options carries over to the 4-Year Option of the Bachelor of Nursing (Collaborative) Program as a first failure in the relevant course(s).
7. Failure in excess of two nursing courses during the program will result in withdrawal from the Bachelor of Nursing (Collaborative) Program.
8. A student who is required to withdraw from the Bachelor of Nursing (Collaborative) $4-$ Year Option due to academic failure, as outlined in the clause above, may appeal for readmission to the School of original admission after a lapse of two semesters as outlined under Readmission Regulations for the Faculty of Nursing.
9. A student who is required to withdraw from the program a second time will not be eligible for future admission/readmission to the program.
10. A student may be required to withdraw from a nursing course with a clinical component or from the program at any time, on the recommendation of the Committee on Undergraduate Studies, if the student is deemed unsafe in a clinical setting, or if the student's behaviour prohibits achievement of the course or program objectives. This clause could also be applied to a student who displays unethical or unprofessional behavior in classroom, lab or clinical settings. A students who is required to withdraw from the program for any of these reasons will not be eligible for future admission/readmission to the program or the Faculty of Nursing.
11. A student who does not complete a nursing course for a period of three consecutive semesters will be considered to have withdrawn from the program.
12. A student in the Bachelor of Nursing (Collaborative) Program who would like to take a leave of absence from the program may do so only with the written permission of the Dean or delegate. A leave will be granted for a maximum period of three consecutive semesters. A student on leave who plan to resume studies must notify the Dean/Director in writing one semester prior to registration.
13. A student in the Bachelor of Nursing (Collaborative) Program who voluntarily withdraws from the program prior to the conclusion of the first semester of the first year and who would like to return to the program must re-apply in competition as a new applicant.
14. A student in the Bachelor of Nursing (Collaborative) Program who voluntarily withdraws from the program, at the conclusion of the first semester of the program, or later, and who would like to return to the program, must appeal for readmission as outlined under Readmission Regulations for the Faculty of Nursing.
15. A student in the Bachelor of Nursing (Collaborative) Program who is readmitted following a period of absence, either as a result of a leave of absence or a withdrawal from the program, upon the recommendation of the Committee on Undergraduate Studies may be required to undertake remedial work, which can include repeating clinical, laboratory, or classroom courses, or repeating one or more terms of the program. A student will be advised of the remedial program at the time of readmission. All remedial work must be successfully completed before a student will be permitted to proceed in the program.

## 8 Graduation

Upon meeting the qualifications for any of the programs noted above a student must apply to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

## 9 Waiver of Faculty Regulations

Any student whose request for waiver of Faculty regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

1. The Faculty reserves the right in special circumstances to modify, alter, or waive any Faculty regulation in its application to individual students where merit and equity so warrant in the judgment of the Committee on Undergraduate Studies of the Faculty.
2. All requests for a waiver of a Faculty regulation must be submitted in writing to the Chair of the Committee on Undergraduate Studies of the Faculty for consideration by the committee. Medical and/or other documentation to substantiate the request must be provided.
3. Any waiver granted does not reduce the total number of credit hours required for the degree.
4. Transfer credit applications for courses designated by NURS in lieu of courses previously completed are normally not accepted. Applications are reviewed on an individual basis, and only if the grade achieved in the completed course is $65 \%$ or higher.

## 10 Supplementary Examinations

Any student receiving a grade of $60 \%$ in a Nursing course may be eligible to write a supplementary examination in that course.
In addition to meeting UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), upon successful completion of the supplementary examination, a student must also meet the promotion regulations of the Faculty. For further information refer to Promotion Regulations.

1. Supplementary examinations are permitted only in Nursing courses that have a written final examination.
2. Supplementary examinations will have the same weight as final examinations for the course in determining whether the student achieves a passing grade for the course.
3. A student may write a supplementary examination for any one course only once.
4. No more than three supplementary examinations in Nursing courses can be written during the program.
5. Any student writing a supplementary examination may obtain no more than a maximum grade of $65 \%$ in the course.
6. If it is mathematically impossible to achieve a passing grade in a course the student will not be granted a supplementary examination
7. Supplementary examinations will be written no later than the first week of the semester immediately following the one in which the course was failed. Normally they should coincide with the writing of deferred examinations in courses where deferred examinations are granted for the semester in question. Grades for supplementary examinations must be received by the Office of the Registrar within one week following the completion of the examination.
8. Supplementary exams are not available for the Nursing Bridging Course offered at the Centre for Nursing Studies prior to entering the second year of the Bachelor of Nursing (Collaborative) Program.

## 11 Appeal of Regulations

Any student whose request for waiver of Faculty regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 12 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the Faculty.
All courses of the Faculty are designated by NURS.
1002 Anatomy and Physiology I explores normal human anatomy and physiology. Students will develop an understanding of the interrelationships of all body systems, from the chemical and cellular levels to the level of the whole organism. Special emphasis is given to the integumentary, skeletal, muscular, nervous and endocrine systems.
CR: Pharmacy 2002 or the former Pharmacy 3201
LH: 2
PR: Science 1807 and Science 1808
1003 Developing Therapeutic Relationships focuses on the application of caring theory to interpersonal communications. It emphasizes the development of the role of communicator in individual and group experiences and in professional relationships. Utilizing an experiential model, laboratory experiences focus on self-awareness and group dynamics.
CO: NURS 1004
LH: 2
1004 Nursing Foundations introduces the student to the profession of nursing. The metaparadigm concepts of person, environment, health, and nursing will serve as a fundamental framework for the exploration of nursing and health care systems.

1012 Anatomy and Physiology II explores normal anatomy and physiology. Students will develop an understanding of the interrelationships of all body systems, from the chemical and cellular levels to the level of the whole organism. Special emphasis is given to the circulatory, respiratory, urinary, digestive, and reproductive systems, including pregnancy and delivery.
CR: Pharmacy 2003 or the former Pharmacy 3202
LH: 2
PR: NURS 1002, Science 1807 and Science 1808
1014 Health Assessment explores concepts related to the health assessment of individuals across the lifespan. The course will focus on the role of the nurse and development of competencies in health history interviewing, physical examination, interpretation of findings, and documentation.
CO: NURS 1012, 1015, 1016, 1520
CR: the former NURS 2040
LH: 2
1015 Health Promotion explores nursing concepts and theories pertaining to health promotion/protection throughout the lifespan. Content includes principles of teaching/learning, introduction to community population health and primary health care concepts, and the determinants of health.
CR: the former NURS 1011
PR: NURS 1003 and 1004; or admission to the Accelerated Option
1016 Caring for the Older Adult: Theory explores concepts and issues applicable to the health, wellbeing and nursing care/needs of the older adult. Emphasis will be placed on theories, normal physical changes, common chronic conditions, psychosocial, and ethical/legal issues associated with aging.
CO: NURS 1012, 1014, 1015 and 1520; or admission to the Accelerated Option
PR: NURS 1002, 1003, and 1004; or admission to the Accelerated Option
1017 Fundamental Psychomotor Competencies provides the student with
an opportunity to acquire beginning psychomotor competencies that are necessary for the provision of client comfort and safety.
CH: 1
CO: NURS 1002, 1003, 1004
LC: 0
LH: 2
1520 Caring for the Older Adult: Practice allows the student to integrate knowledge and practise the competencies acquired to date. The focus is the promotion, protection and maintenance of health for older individuals. During this clinical course, students will have the opportunity to provide care to clients with various health needs.
CO: NURS 1012, 1014, 1015, 1016
OR: 96 clinical hours during the semester
PR: NURS 1002, 1003, 1004, 1017
2002 Care of Childbearing Family: Theory covers major concepts in women's reproductive health, and presents the nurse's roles in facilitating the adaptation of families through all phases of the childbearing cycle. Other foci are adaptation to transitions, and nursing care of women experiencing alterations in reproductive health.
CO: NURS 2003, 2004, 2502
CR: the former NURS 2001
PR: NURS 1520, 2003, and 2004
UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.
2003 Pathophysiology presents general concepts of disease processes and their impact on health. The course focuses on major pathophysiologic changes, including associated etiology, pathogenesis and clinical manifestations. Common illnesses are studied to illustrate these disease processes.
CO: NURS 2004
OR: tutorial 1.5 hours per week
PR: NURS 1012, 1014, 1015, 1016, 1520, and Biochemistry 1430
2004 Pharmacology explores principles and concepts in the use medications for the management of common health problems across the lifespan. Nursing considerations and psychomotor competencies pertinent to traditional pharmaceuticals and commonly used natural health products (NHPs) are addressed.
CO: NURS 2003
LH: 2
PR: NURS 1012, 1014, 1015, 1016, 1017, 1520, and Biochemistry 1430
2014 Community Health Nursing Theory - inactive course.
2015 Health Alterations I: Theory - inactive course.
2502 Care of the Childbearing Family: Practice allows the student to apply knowledge and practise competencies acquired in NURS 2002. Clinical experiences are offered in a variety of institutional and communitybased settings related to the provision of nursing care for women and their families through the antenatal and postpartum phases of the childbearing cycle.
CH: 2
CO: NURS 2002
CR: the former NURS 2501
LH: 24 hours during the semester
OR: 48 clinical hours during the semester
UL: students admitted prior to Fall 2018 will follow the Calendar course
description for their year of admission. Fast-Track Option and LPN
Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.
2514 Community Health Nursing Practice I provides the student with the opportunity to apply knowledge and practise competencies for beginning community health nursing practice acquired in Community Health Nursing

[^24]Theory.
CO: NURS 4101
OR: 96 clinical hours during the semester
PR: NURS 1520
2515 Health Alterations I: Practice allows students to apply knowledge and competencies acquired through NURS 2015 and related courses. Clinical experiences are offered in a variety of settings to provide nursing care for clients across the lifespan.
CO: NURS 2003, 2004, 2015
CR: the former NURS 2511 or 3512 or 3513
LH : 24 hours during semester
OR: 96 clinical hours during the semester; may be offered over six weeks PR: NURS 1520, 2003, 2004

2516 Health Alterations I: Practice allows students to integrate knowledge and competencies acquired through NURS 2015 and related courses. Clinical experiences are offered in a variety of settings to provide nursing care for clients across the lifespan.
CH: 4
CO: NURS 2003, 2004, 2015
CR: NURS 2515, 2520, 3512, 3513, or the former NURS 2511
LH: 24 hours during semester
OR: 144 clinical hours over six weeks
PR: NURS 1520, 2003, 2004
UL: restricted to students following the Accelerated Option sequence of the Bachelor of Nursing (Collaborative) Program

2520 Extended Practice allows the student to integrate the knowledge and practise the competencies acquired to date in a consolidated clinical experience. The focus is on caring for clients with health alterations in an assigned clinical setting. This course is normally offered at the end of the Winter semester, beginning during the final week of the examination period.
CO: NURS 2002, 2015, 2502 and 2515
OR: 96 clinical hours over three weeks
PR: NURS 2002, 2003, 2004, 2015, 2502
3000 Community Health: Theory focuses on the knowledge required to practice nursing in the community with a variety of clients including individuals, families, groups and communities. It further examines the principles of primary health care, population health, and their application in community health nursing as well as the multidimensional role of the nurse.
CO: NURS 3104 and 3500 or 4502; or Accelerated Option student designation
CR: NURS 2014, 4101
OR: seminar or lab 2 hours per week
PR: NURS 2520; or Accelerated Option student designation
3001 Mental Health: Theory focuses on clients experiencing mental health issues and addictions across the lifespan. Issues affecting mental health, illness, and addictions are explored as well as treatment modalities.
CO: NURS 3501 or NURS 4502
OR: seminar 2 hours per week
PR: NURS 2520; or Accelerated Option student designation
3012 Nursing Concepts for Children, Adolescents and Young Adults uses a conceptual approach to focus on the nursing care of individuals and families, from infancy to young adulthood. The emphasis is on assisting persons experiencing health related needs to achieve health and well-being.
CO: NURS 3512 or NURS 3513
CR: the former NURS 2011
PR: NURS 2520
3014 Nursing Concepts in Middle and Older Adulthood uses a conceptual approach and focuses on individuals and families from middle to older adulthood. The emphasis is on assisting persons experiencing acute and chronic health related needs to achieve health and well being.
CO: NURS 3514
CR: the former NURS 3111
PR: NURS 2520
3015 Health Care Alterations II: Theory uses a conceptual approach to focus on the nursing care of individuals and families, across the lifespan. The emphasis is on acquiring and applying knowledge for the care of persons experiencing alterations along the wellness continuum. This is the second of two courses with this focus, and builds on the foundation provided by NURS 2015.
CO: NURS 3104 or Accelerated Option student designation, NURS 3515
PR: NURS 2520; or Accelerated Option student designation
3104 Nursing Research builds on previously introduced research concepts. The research process is explored in depth including its inherent ethical and legal implications. Through critical appraisal of nursing research, students will develop skills to evaluate the suitability of research findings to promote safe, competent, evidence-informed care. The focus is on ensuring students become knowledgeable consumers of research and continue to question practice and contribute to knowledge discovery.
PR: NURS 2520 or Accelerated Option student designation, and Statistics 1510 or 2500 or equivalent or Education 2900

3113 Professional Development I allows the student to gain an understanding of the theories and principles related to professional development. Current issues and trends in nursing leadership and management will be explored within the context of nursing practice.
CO: NURS 3104, 3500, 3514, 3515, and (3501 or 4502; or Accelerated Option student designation
PR: NURS 2520 or Accelerated Option student designation
UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.

3500 Community Health Practice allows the student to apply relevant theories and concepts of community health nursing acquired in NURS 3000 and related courses. Throughout clinical experience, students implement a client-centered approach to empower individuals, families, groups, communities to improve health status.
CO: NURS 3000, 3104
CR: NURS 4501, 4502
OR: 96 hours during the semester
PR: NURS 2520
3501 Mental Health: Practice allows the student to apply theoretical knowledge and to practise competencies acquired in NURS 3001 and related courses. Clinical experiences related to the provision of nursing care for clients with mental illness and addictions are offered in a variety of settings.
CO: NURS 3001
OR: 96 hours during the semester
3512 Nursing Practice with Children, Adolescents and Young Adults provides the student with opportunities to apply knowledge and practise competencies acquired to-date, particularly in NURS 3012. Selected experiences are offered in a variety of institutional and community based settings related to the provision of nursing care for children, adolescents, young adults and their families.
CO: NURS 3012
CR: the former NURS 2511
$\mathrm{LH}: 24$ hours during the semester
OR: 64 clinical hours during the semester usually offered over four weeks
PR: NURS 2520
3513 Nursing Practice with Children, Adolescents and Young Adults provides the student with opportunities to apply knowledge and practise competencies acquired to-date, particularly in the former NURS 2017 and 3012. Selected experiences are offered in a variety of institutional and community based settings, related to the provision of nursing care for children, adolescents, young adults and their families.
CH: 2
CO: NURS 3012
CR: the former NURS 2511 and NURS 3512
OR: 64 clinical hours during the semester usually offered over four weeks
PR: the former NURS 2017 and NURS 2520
3514 Nursing Practice with Middle and Older Adults provides the student with the opportunity to practise competencies and apply knowledge acquired NURS 3014 and related courses. Selected experiences related to the provision of nursing care for middle and older adults, and their families are offered in a variety of institutional and community based settings.
CO: NURS 3014
CR: the former NURS 3511
LH : 24 hours during the semester
OR: 96 clinical hours during the semester usually offered over six weeks
PR: NURS 2520
3515 Health Alterations II: Practice allows students to apply knowledge and competencies acquired through NURS 3015 and related courses. Clinical experiences are offered in a variety of settings to provide nursing care for clients across the lifespan.
CO: NURS 3015 and 3104 or Accelerated Option student designation CR: the former NURS 3511 or 3514
LH : 24 hours during the semester
OR: 120 clinical hours during the semester; may be offered over six weeks PR: NURS 2520

3523 Preceptorship provides students with a consolidated experience in clinical settings. Students will further develop clinical competencies acquired in previous courses in the provision and coordination of nursing care.
CH: 6
CR: the former NURS 3520 and the former 3521
OR: 40 clinical hours per week for six weeks for students admitted to the 4Year Option from Fall 2018 and onward
PR: NURS 3001, 3104, 3113 and ( 3501 or 4502) (NURS 3012, 3014, 3512 or 3513, and 3514) or (NURS 3000, 3015, 3500 and 3515), and clinical placement approval
UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).

4100 Advanced Concepts and Skills provides an opportunity for students to consolidate and solidify knowledge from previous courses to address complex health care needs. Students critically appraise and synthesize concepts and theories of nursing, science and humanities through identifying and addressing salient issues impacting health and well-being at individual, family, community and population/environmental levels, and integrate higher level competencies for care.
CO: NURS 4501 or 4502
OR: labs/seminar 2 hours per week
PR: NURS 3523 or admission to the Fast-Track Option
4101 Community Health Nursing focuses on the knowledge required to practise nursing at the aggregate and community levels. It further examines the principles of primary health care, their application in community health nursing and the multidimensional role of the nurse. Core concepts include: community development, epidemiology, program development, and the theoretical bases of community health nursing.
CO: NURS 2514 and admission to the Fast-Track Option
CR: NURS 2014
OR: tutorial 2 hours per week
4103 Professional Development II promotes professional development through a professional framework for nursing practice. It includes a critical appraisal of current trends and issues within nursing, health care systems, and the global environment.
PR: NURS 3113 or admission to the Fast-Tack Option
UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.

4501 Community Health Nursing Practice II provides the student with opportunities to apply knowledge acquired in Community Health Nursing Theory and other related courses. It also further develops competencies in community health nursing practice. In the clinical experiences, students work with selected aggregates (including individuals and families) in the community.
CO: NURS 4103
CR: NURS 3500, 4502
OR: 96 hours during the semester
PR: NURS 2014, 2514, 3523

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4502 Nursing Care in Community and Mental Health Settings provides opportunities for practice in acute care psychiatric/mental health and community settings with individuals, families, and groups/aggregates. The application of community health and mental health knowledge and
competencies, with a particular focus on the concepts of vulnerability/ resilience, will be emphasized.
CH: 6
CO: NURS 3000, 3001, 3104
CR: NURS 3501 and NURS 4501
OR: 168 hours during the semester
PR: (admission to the Fast-Track Option and NURS 2014 or 4101, 2514, 3014, 3104, and 3514) or (admission to the Accelerated Option and NURS 3000, 3001, 3015, 3104 and 3515)
4512 Community Health Practicum allows the students to integrate and consolidate knowledge and competencies acquired throughout the program and apply them to community health nursing practice. Using a primary health care framework, the student participates in strategies that facilitate the mobilization of communities toward health. NURS 4512 in the Fast-Track Option is one of five courses in Semester 5. It begins in April and progression into this course is dependent on successful completion of the other four nursing courses scheduled for Jan-April in the same semester.
CH: 6
OR: 40 clinical hours per week for six weeks for students admitted to the 4Year Option from Fall 2018 and onward
PR: NURS 3523, 4103 and 4501; or NURS 4101 and admission to the Fast-Track Option; or NURS 3523 and admission to the Bachelor of Nursing (Collaborative) Program after 2017
UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.
4516 Consolidated Practicum allows students to engage in nursing practice with a diverse client population along the wellness continuum. The course enables students to integrate and synthesize knowledge as they further develop their professional roles and responsibilities.
CH: 9
CR: the former NURS 4514 or the former NURS 3522, and the former - NURS 4513

OR: 40 clinical hours per week for twelve weeks for students admitted to the 4-Year Option from Fall 2018 and onward
RR: (NURS 4100, 4103 and 4501 or 4502) or (NURS 4100, 4103 and 4512) and clinical placement approval

UL: students admitted prior to Fall 2018 will follow the Calendar course description for their year of admission. Fast-Track Option and LPN Bridging Option students admitted to Fall 2018 and onward will follow the 2017-2018 University Calendar course description.


## SCHOOL OF PHARMACY

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www.mun.ca/pharmacy
Dean
Bugden, S., B.Sc.(Pharm.), University of Manitoba, M.Sc. Oxford, Pharm D. University of Washington; Associate Professor
Up-to-date personnel listings are available at www.mun.ca/pharmacy/about/people.php.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

### 2.1 Pharmacy Students

In addition to the Student Code of Conduct above, students in Pharmacy programs are also required to adhere to the Newfoundland and Labrador Pharmacy Board Code of Ethics, the Code of Professional Conduct for Pharmacy Students, and the School of Pharmacy Pledge of Professionalism as outlined at www.mun.ca/pharmacy/.

## 3 School Description



The School of Pharmacy is committed to providing programs of quality and excellence that will prepare individuals to contribute significantly in pharmacy practice settings. The experiential learning component of the programs ensures students have the opportunity to integrate academic learning with professional practice and to develop the necessary knowledge, skills and attitudes required of practicing pharmacists. The School encourages a close working relationship among students, faculty, and staff, and prides itself on its strong association with and support of the pharmacy community at both the provincial and national level.
Information regarding the School of Pharmacy (undergraduate and graduate programs) is available at www.mun.ca/pharmacy. For additional information on graduate programs see School of Graduate Studies.
Students must meet all regulations of the School in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Vision Statement

To be a distinguished and innovative experienced-based pharmacy education program that fosters excellence in practice, professionalism, scholarship, and research to improve our citizens' health and well-being.

### 3.2 Mission Statement

The School of Pharmacy:
Cultivates programs of distinction in pharmacy education and research, engages the broader community and offers innovative programs that are destinations of choice for undergraduate and graduate students, employers and funding agencies, and provides leadership in pharmacy practice and research

### 3.3 Accreditation Status

The Bachelor of Science (Pharmacy) program of the School of Pharmacy at Memorial University of Newfoundland has been awarded Full Accreditation Status by the Canadian Council for Accreditation of Pharmacy Programs for the period 2017-2021.
The Doctor of Pharmacy program of the School of Pharmacy at Memorial University of Newfoundland has been awarded Provisional Accreditation by the Canadian Council for Accreditation of Pharmacy Programs for the period 2017-2021.

## 4 Description of Programs

Students previously admitted to the former Bachelor of Science (Pharmacy) program, and in good standing, must complete all program requirements by 2021 . Students currently completing the requirements for this program must follow the Calendar regulations for the Academic year in which they were admitted to the program. Memorial University of Newfoundland Calendars by Academic year can be viewed at www.mun.ca/regoff/calendar.php.

### 4.1 Doctor of Pharmacy (Pharm.D.)

The School of Pharmacy offers two program options leading to the undergraduate Doctor of Pharmacy (Pharm.D.) degree program, the full-time, entry-to-practice program and the part-time program for working professionals.

### 4.1.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

The full-time, entry-to-practice Doctor of Pharmacy (Pharm.D.) program prepares students to graduate as medication therapy experts, prepared to embrace the full scope of pharmacy practice. Students are required to complete 30 credit hours of specific prerequisite courses prior to entry into the program, followed by five years of study in the pharmacy program. The program is student-focused, comprehensive, and experience-based. The curriculum provides students with the scientific knowledge and clinical skills necessary to enter professional practice. Instructional methods emphasize critical thinking, problem-solving, communication, professionalism, and ethical behaviours. During the program, students will develop an understanding of the professional and societal responsibilities of a
pharmacist, and will recognize the need for lifelong learning. The extensive Pharmacy Practice Experience component prepares students for a variety of professional settings. The aim is to graduate students who are scientific inquisitors, interprofessional collaborators, independent decision makers, and leaders who have the ability to adapt their practice to fulfil their evolving professional roles. Pharm.D. graduates will be prepared to practice independently in a variety of pharmacy settings including community pharmacy, hospital pharmacy, pharmaceutical industry, pharmacy organizations, research, government, and academia.
All courses in the School of Pharmacy are designated by the abbreviation PHAR.

### 4.1.1.1 Registration as a Pharmacy Student

A student must register annually with the Newfoundland and Labrador licensing body as a "Pharmacy Student" by September 30th. As part of the registration process, students must provide a current certificate of conduct (criminal record check). Further information may be obtained at www.nlpb.ca. Additionally, prior to the commencement of a Pharmacy Practice Experience in another Canadian jurisdiction, a student must register with the respective provincial or territorial licensing body. Further requirements may exist for international Pharmacy Practice Experience. A student who fails to meet the registration requirements will be required to withdraw from the program.

### 4.1.1.2 Pharmacy Practice Experience (PPE)

Through Pharmacy Practice Experiences, the program aims to prepare students for exemplary pharmacy practice. Students are expected to display appropriate communication, professionalism, and teamwork, and demonstrate increased independence and critical reasoning as they progress in the program. PPEs consist of early and intermediate experiences as well as advanced pharmacy practice experiences (APPE). PPEs expose students to situations which cannot be provided in the classroom.

1. The School of Pharmacy is responsible for providing overall direction for practice experiences and will oversee the placement of students at sites. Students may be assigned to any participating site within the Province of Newfoundland and Labrador; a request to complete a PPE outside the province may be considered.
2. Students are responsible for all travel and accommodation costs associated with the PPE.
3. Students are required to provide evidence of a valid Standard First Aid Leve C certificate for all PPEs. Evidence of recertification must be submitted no later than one month before the expiry date of the certification.
4. Students must have successfully completed injection training before they start an APPE.
5. Students must comply with the policies of the site to which they are assigned. Sites may have requirements for immunization, testing or documentation beyond those required by the School. Students are required to complete these requirements in a timely fashion and at their own expense. Students unable to meet these site requirements may be delayed in their program or prevented from completing their program of study.

### 4.1.1.3 Pharmacy Practice Experience Evaluation

1. Evaluation of the student's performance is conducted by the preceptor responsible for supervising the student during the PPE. Preceptors determine the competency level of the student for each of the outcomes.
2. The School determines the grade of each PPE, based upon the evaluation provided by the preceptor. Students will be graded as PAS (pass) or FAL (fail).
3. Students who conduct themselves in such a manner as to be terminated from the PPE site will be assigned a grade of FAL (fail) for that PPE and may be required to withdraw from the program.

### 4.1.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

The Doctor of Pharmacy (Pharm.D.) for Working Professionals is a part-time undergraduate program designed for practicing pharmacists who wish to remain employed while pursuing the degree of Doctor of Pharmacy. A cohort-based learning environment offers an effective blend of theory and practice. The program is comprised of 15 courses totalling 55 credit hours and can be completed either as a three- or a four-year option. The program supports a patient-centered course of study and will be delivered through a combination of online courses, on-campus clinical skills workshops, and experiential learning.
All courses in the School of Pharmacy are designated by the abbreviation PHAR.

### 4.1.2.1 Registration as a Pharmacist

A student must be licensed as a "Pharmacist" through the student's pharmacy licensing body in the province, territory, or country in which they reside. Applicants will be asked to submit proof of licensure with the application for admission to the School and must maintain licensure throughout the program. Additionally, prior to the commencement of an Advanced Pharmacy Practice Experience in another jurisdiction, a student must register with the respective licensing body. Further requirements may exist for international Advanced Pharmacy Practice Experiences. A student who fails to meet the registration requirements will be required to withdraw from the program.

### 4.1.2.2 Advanced Pharmacy Practice Experience (APPE)

1. The Pharm.D. for Working Professionals requires the completion of two Advanced Pharmacy Practice Experiences (APPE) in the final year of the program. Students may request to complete both APPE courses in either Winter semester or Spring semester of the final year of the program.
2. The School of Pharmacy provides overall direction for practice experiences and will oversee the placement of students at practice sites. Students are responsible for all travel and accommodation costs associated with APPEs.
3. For all APPEs, students are required to provide evidence of a valid Standard First Aid Level C certificate. Evidence of recertification must be submitted no later than one month before the expiry date of the certification.
4. Students are required to provide evidence of authorization to administer drugs by injection prior to the first APPE.
5. Students must comply with the policies of the site to which they are assigned. Sites may have requirements for immunization, testing or documentation beyond those required by the School. Students are required to complete these requirements in a timely fashion and at their own expense. Students unable to meet these site requirements may be delayed in their program or prevented from completing their program of study.

### 4.1.2.3 Advanced Pharmacy Practice Experience Evaluation

1. Evaluation of the student's performance is conducted by the preceptor responsible for supervising the student during the APPE. Preceptors determine the competency level of the student for each of the outcomes.
2. The School determines the grade of each APPE, based upon the evaluation provided by the preceptor. Students will be graded as PAS (pass) or FAL (fail).
3. Students who conduct themselves in such a manner (such as violation of the Student Code of Conduct) as to be terminated from an APPE site will be assigned a grade of FAL (fail) for that APPE and may be required to withdraw from the program.

## 5 Admission Regulations for the School of Pharmacy

In addition to meeting the UNIVERSITY REGULATIONS students applying for admission to programs offered by the School of Pharmacy must meet the appropriate admission regulations of the School.

### 5.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

### 5.1.1 General Information

1. Admission will be to the first year of the full-time, entry-to-practice Doctor of Pharmacy program in the Fall term.
2. Entry to the School is competitive for a limited number of seats. Priority is given to applicants who are residents of Newfoundland and Labrador. The final decision on admission is determined by the Committee on Undergraduate Student Admissions of the School of Pharmacy.
3. As part of the regular quota, one seat per year is available in the program for bona fide residents of Newfoundland and Labrador First Nations or Aboriginal ancestry who have met the minimum numeric grade and course requirements for admission to the program.
4. The Committee on Undergraduate Student Admissions of the School of Pharmacy considers each applicant's academic background and information on the applicant's personal characteristics and achievements as given by the applicant. Normally, personal interviews (which may include both a written and oral component) will be required. Reports from referees may also be considered.
5. The School of Pharmacy does not require certificates of conduct (criminal record checks), or other screening procedures as a condition of admission to its program. However, applicants should be aware that a certificate of conduct will be required as part of the registration process with the Newfoundland and Labrador pharmacy licensing body. In addition, applicants should be aware such certificates of conduct or other screening procedures may be required by practice experience sites used by the University for academic course assignments necessary for graduation. Such sites may refuse to accept students on the basis of information contained in the record check or other screening procedure thus preventing the students from completing a practice experience or other clinical requirement. As a result, such students may not be eligible for promotion or graduation. It is the students' responsibility to have such checks and screening procedures completed as required and at their own expense. The screening procedures of any given site may change from time to time and are beyond the control of the University.

### 5.1.2 Application Forms and Deadlines

1. The application for admission or readmission to programs offered by the School of Pharmacy is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. The deadline date for submission of applications is February 1st for Fall admission.
2. All supporting documentation and fees for admission to the program must be received on or before the deadline of February 1 st in any year.
3. Incomplete applications and applications received after the deadline will not be considered.

### 5.1.3 Admission Requirements

Applicants who are not currently students at Memorial University of Newfoundland must apply for admission to the University under the Categories of Applicants, Admission Criteria and Other Information outlined under UNIVERSITY REGULATIONS - Admission/
Readmission to the University (Undergraduate). In addition to meeting these regulations, applicants to the School must meet requirements as indicated below.

1. To be considered for admission, an applicant must have completed the 30 credit hours outlined below by the end of the Winter term for the year in which admission is being sought. These courses and credits must have been taken at Memorial University of Newfoundland or accepted for transfer credit from an academic institution. The 30 credit hours are:

- Biology 1001 and 1002
- Chemistry 1050 and 1051
- 6 credit hours in English, 3 credit hours of which may be replaced by any Memorial University of Newfoundland Critical Reading and Writing (CRW) course
- Mathematics 1000 and 1001
- Physics 1020 or 1050, and Physics 1021 or 1051

2. Fôr students attending Grenfell Campus, the following course offerings are acceptable for admission to the School;

- Biology 1001 and 1002
- Chemistry 1200 and 1001

6 credit hours in English, 3 credit hours of which may be replaced by any Memorial University of Newfoundland Critical Reading and Writing (CRW) course

- Mathematics 1000 and 1001
- Physics 1020 or 1050, and Physics 1021 or 1051

3. Normally an application will not be considered from an applicant who cannot produce evidence that the above requirements have been met or will have been met by end of the Winter term of the year in which admission is being sought.
4. An unsuccessful applicant who wishes to reapply for admission is required to submit the application forms relevant to the year of reapplication and will be required to enter into the competition for that year.

### 5.1.4 Acceptance Procedures

1. The decision of the Committee on Undergraduate Student Admissions of the School of Pharmacy will be sent electronically to
applicants by the Dean of the School. No other form of notification will be considered official.
2. Applicants shall have 10 calendar days from the date of offer of admission in which to confirm acceptance. The signed intention to accept the offer must be accompanied by a deposit of $\$ 500$, which will be credited towards tuition fees. The deposit will be forfeited if the applicant subsequently declines the offer or fails to register in the Pharmacy program for the Fall term.
3. If the acceptance form and deposit is not received within 10 calendar days, the offer by the School will be withdrawn, and the applicant will be notified.
4. Students who fail to register for courses for the Fall term of admission will be considered withdrawn from the program. Such applicants, if they wish to be considered for admission in the future, must submit a new application for admission to the program.
Applicants requiring additional information may refer to the School of Pharmacy website at www.mun.ca/pharmacy.

### 5.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

### 5.2.1 General Information

1. Admission will be to the first year of the Doctor of Pharmacy (Pharm.D.) for Working Professionals in the Fall term.
2. Entry to the program is competitive for a limited number of seats. Priority is given to applicants who are residents of Newfoundland and Labrador or who graduated from Memorial University of Newfoundland's School of Pharmacy. The final decision on admission is determined by the Committee on Undergraduate Student Admissions of the School of Pharmacy.
3. The Committee on Undergraduate Student Admissions of the School of Pharmacy considers each applicant's professional background and information on the applicant's personal characteristics and achievements as given by the applicant.
4. The School of Pharmacy does not require certificates of conduct (criminal record checks) or other screening procedures as a condition of admission to its program. However, applicants should be aware such certificates of conduct or other screening procedures may be required by practice experience sites used by the University for academic course assignments necessary for graduation. Such sites may refuse to accept students on the basis of information contained in the record check or other screening procedure thus preventing the students from completing a practice experience or other clinical requirement. As a result, such students may not be eligible for promotion or graduation. It is the students' responsibility to have such checks and screening procedures completed as required and at their own expense. The screening procedures of any given site may change from time to time and are beyond the control of the University.

### 5.2.2 Application Forms and Deadlines

1. The application for admission or readmission to programs offered by the School of Pharmacy is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.-mun.ca/undergrad/apply. The deadline date for submission of applications is February 1st for Fall admission.
2. All supporting documentation and fees for admission to the program must be received on or before the deadline of February 1st in any year.
3. Incomplete applications and applications received after the deadline will not be considered.

### 5.2.3 Admission Requirements

Applicants who are not currently students at Memorial University of Newfoundland must apply for admission to the University under the Categories of Applicants, Admission Criteria and Other Information outlined under UNIVERSITY REGULATIONS - Admission/ Readmission to the University (Undergraduate). In addition to meeting these regulations, applicants to the School must meet requirements as indicated below.
To be considered for admission, an applicant:

1. must be a licensed pharmacist in good standing with the licensing body; and
2. must have graduated with a Bachelor's degree from an accredited Canadian Pharmacy program or the former pharmacist diploma program from the Newfoundland and Labrador College of Trades and Technology; and/or have successfully completed the Pharmacy Examining Board of Canada (PEBC) Qualifying Exam.
An unsuccessful applicant who wishes to reapply for admission is required to submit the application forms relevant to the year of reapplication and will be required to enter the competition for that year.

### 5.2.4 Acceptance, Procedures

1. The decision of the Committee on Undergraduate Student Admissions of the School of Pharmacy will be sent electronically to applicants by the Dean of the School. No other form of notification will be considered official.
2. Applicants shall have 10 calendar days from the date of offer of admission in which to confirm acceptance. The signed intention to accept the offer must be accompanied by a deposit of $\$ 1,000$, which will be credited towards tuition fees. The deposit will be forfeited if the applicant subsequently declines the offer or fails to register in the Pharmacy program for the Fall term.
3. If the acceptance form and deposit is not received within 10 calendar days, the offer by the School will be withdrawn, and the applicant will be notified.
4. Students who fail to register for courses for the Fall term as set out in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program will be considered withdrawn from the program. Such applicants, if they wish to be considered for admission in the future, must submit a new application for admission to the program.

## 6 Program Regulations

### 6.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

- The 224 credit hour full-time, entry-to-practice Doctor of Pharmacy (Pharm.D.) program requires 30 credit hours before admission and 194 credit hours after admission to the program.
- The program courses normally shall be taken in the Academic Terms in the sequence and course load as set out in Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program.

Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

| Term | Required Courses |
| :---: | :---: |
| Courses required for admission as indicated under Admission Requirements, Doctor of Pharmacy (Pharm.D.), Full-Time Program. | Biology 1001 and 1002 <br> Chemistry 1050 and 1051 (St. John's Campus) or Chemistry 1200 and 1001 (Grenfell Campus) <br> 6 credit hours in English, 3 credit hours of which may be replaced by any Memorial University of <br> Newfoundland Critical Reading and Writing (CRW) course <br> Mathematics 1000 and 1001 <br> Physics 1020 or 1050 and Physics 1021 or 1051 |
| Fall Year 1, Academic Term 1 | Chemistry 2400 <br> PHAR 2002 <br> PHAR 2010 (may be completed in Fall, Winter or Spring) <br> PHAR 2201 <br> PHAR 2250 <br> PHAR 2610 |
| Winter Year 1, Academic Term 2 | Chemistry 2401 <br> PHAR 2003 <br> PHAR 2004 <br> PHAR 2010 (if not previously completed) <br> PHAR 2202 <br> PHAR 2251 <br> PHAR 2620 |
| Spring Year 1, Academic Term 3 | PHAR 2010 (if not previously completed) |
| Fall Year 2, Academic Term 4 | PHAR 3111 <br> PHAR 3250 <br> PHAR 3270 <br> PHAR 3801 <br> PHAR 3805 |
| Winter Year 2, Academic Term 5 | PHAR 3006 <br> PHAR 3251 <br> PHAR 3271 <br> PHAR 3410 <br> PHAR 3810 <br> PHAR 3825 |
| Spring Year 2, Academic Term 6 | PHAR 305P |
| Fall Year 3, Academic Term 7 | PHAR 4250 <br> PHAR 4270 <br> PHAR 4620 <br> PHAR 4802 <br> PHAR 4810 <br> Statistics 2550 |
| Winter Year 3, Academic Term 8 | $\begin{array}{\|l} \hline \text { PHAR } 4251 \\ \text { PHAR } 4271 \\ \text { PHAR } 4420 \\ \text { PHAR } 4820 \\ \text { PHAR } 4860 \\ \hline \end{array}$ |
| Spring Year 3, Academic Term 9 | PHAR 406P PHAR 407P |
| Fall Year 4, Academic Term 40 | PHAR 5250 <br> PHAR 5270 <br> PHAR 5430 <br> PHAR 5815 <br> PHAR 5830 |
| Winter Year 4,Academic Term 11 | PHAR 508P <br> PHAR 5251 <br> PHAR 5271 <br> PHAR 5275 <br> PHAR 5640 |
| Year 5, Advanced Pharmacy Practice Experience | PHAR 605P PHAR 606P PHAR 607P PHAR 608P |

### 6.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

- The 55 credit hour part-time, Doctor of Pharmacy (Pharm.D.) for Working Professionals program is available to be completed either as a three- or a four-year option. Normally, a student must complete the degree requirements either in three- or a four-years from the time of initial admission. Courses normally shall be taken in the Academic terms in the sequence and course load as set out in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program.
- PHAR 5901-5905 may be offered on a rotating basis and may not be offered in the order shown below.
- A student may request to complete both APPE courses (PHAR 610P, PHAR 611P) in either the Winter or Spring semester of the final year of the program.

Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

| Term | Three Year Option - Required Courses | Four Year Option - Required Courses |
| :--- | :--- | :--- |
| Fall Year 1, Academic Term 1 | PHAR 4900 <br> PHAR 4901 <br> PHAR 4902 | PHAR 4900 <br> PHAR 4901 <br> PHAR 4902 |
| Winter Year 1, Academic Term 2 | PHAR 4903 <br> PHAR 4910 | PHAR 4903 <br> PHAR 4910 |
| Spring Year 1, Academic Term 3 | PHAR 5901 | PHAR 5902 |
| Fall Year 2, Academic Term 4 | PHAR 5902 <br> PHAR 5920 | PHAR 5903 |
| Winter Year 2, Academic Term 5 | PHAR 5903 <br> PHAR 5904 | PHAR 5901 |
| Spring Year 2, Academic Term 6 | PHAR 6900 <br> PHAR 6930 | PHAR 5920 |
| Fall Year 3, Academic Term 7 | PHAR 5905 | PHAR 6900 <br> PHAR 6930 |
| Winter Year 3, Academic Term 8 | PHAR 610P | PHAR 5905 |
| Spring Year 3, Academic Term 9 | PHAR 611P | PHAR 610P |
| Fall Year 4, Academic Term 10 |  | PHAR 611P |
| Winter Year 4, Academic Term 11 |  |  |
| Spring Year 4, Academic Term 12 |  |  |

## 7 Promotion Regulations

### 7.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

### 7.1.1 General Information

1. The Committee on Undergraduate Studies of the School of Pharmacy will determine each student's promotion status at the end of each Academic year.
2. In addition to meeting the promotion regulations for the School, students must meet the general academic regulations (undergraduate). For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).
3. Success in the program depends on meeting the requirements of all terms.

### 7.1.2 Promotion Status

A student's promotion status at the end of each Academic year will be in one of the following two categories:

### 7.1.2.1 Clear Promotion

Clear Promotion means a student can proceed to the next Academic year. Clear Promotion will be granted when the following criteria are met

1. A student has completed the Academic year with a weighted average of at least $65 \%$ and a pass (numeric grade of at least $50 \%$ or PAS) in each course. A weighted average will be based on credit hours in the program of study as outlined in Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program.
2. A student has maintained professional and ethical behaviour consistent with the Student Code of Conduct as outlined at: www.mun.ca/pharmacy.

### 7.1.2.2 Promotion Denied

Promotion Denied means Clear Promotion is not achieved at the end of the Academic year. A student with Promotion Denied status will normally be required to withdraw from the School. A student will be deemed to be in Promotion Denied status when any of the following criteria are met:

1. A student has obtained less than a $65 \%$ weighted average in the Academic year or has obtained less than $50 \%$ in any course or has received a grade of FAL (fail) in any course within the Academic year. A weighted average will be based on credit hours in the program of study as outlined in Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program.
2. A student has not maintained the professional and ethical behaviour consistent with the Student Code of Conduct.

Notwithstanding the above, the School of Pharmacy may offer the student the option to repeat an Academic year on the grounds of
academic difficulties. This may be offered only once during the student's program. This restriction may be waived if it has been demonstrated that the student's academic performance has been adversely affected by factors duly authenticated and acceptable to the Committee on Undergraduate Studies of the School of Pharmacy.

### 7.1.2.3 Other Information

To be recommended for graduation, a student must have Clear Promotion at the end of Academic year 4, and must have successfully completed all four Advanced Pharmacy Practice Experience (APPE) courses during Academic year 5. The following criteria will be used to assess the APPE courses:

1. A student must demonstrate consistent professional and ethical behaviour that meets the criteria of Student Conduct as outlined at www.mun.ca/pharmacy.
2. A student is required to obtain a grade of PAS (pass) in all four APPE courses (PHAR 605P, 606P, 607P, 608P).
3. Normally, if a student fails an APPE course, the Committee on Undergraduate Studies of the School of Pharmacy may permit the student to continue to the students next scheduled APPE course and require the student to repeat the failed course at a later date. This may extend the duration of the student's program.
4. In certain circumstances, such as violation of student conduct as outlined at www.mun.ca/pharmacy or failure of an APPE course may result in the student being required to withdraw from the program.
5. A student is permitted to repeat only one APPE course. A student who fails an APPE course (PHAR 605P, 606P 607P, 608P) on a second attempt will be required to withdraw from the program.
6. If a failed grade is received in more than one APPE course, the student will be required to withdraw from the program

### 7.1.3 Student Withdrawal

A student may be required to withdraw from the program at any time, if, in the opinion of the Dean of Pharmacy, the student is unlikely to benefit from continued attendance or if acceptable cause is demonstrated. The Dean will recommend to the Registrar that the student is required to withdraw from the program.

### 7.1.4 Leave of Absence



Upon completion of an Academic year, a student with Clear Promotion may elect to withdraw temporarily from studies. Voluntary withdrawal at other times and for other reasons may be permitted in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Registration. In all cases, the intent to withdraw voluntarily should be discussed with the Dean. At the end of this period, the student, in consultation with the Committee on Undergraduate Studies of the School of Pharmacy, should ensure that sufficient revision and preparatory work is undertaken to allow studies to be resumed readily. In the absence of good cause, any such student who does not resume studies on the specified date may be deemed to have left the program.

### 7.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

### 7.2.1 General Information

1. The Committee on Undergraduate Studies of the School of Pharmacy will determine each student's promotion status at the end of each Academic year.
2. In addition to meeting the promotion regulations for the School, students must meet the general academic regulations (undergraduate). For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).
3. Success in the program depends on meeting the requirements of all terms.

### 7.2.2 Promotion Status

A student's promotion status at the end of each Academic year will be in one of the following two categories:

### 7.2.2.1 Clear Promotion

Clear Promotion means a student can proceed to the next Academic year. Clear Promotion will be granted when all of the following criteria are met:

1. A student has obtained a passing grade in each course as outlined in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program and in the Course Descriptions.
2. A student has maintained professional and ethical behaviour consistent with the Student Code of Conduct as outlined at www.mun.ca/student and with the requirements for conduct and professionalism in the School of Pharmacy as outlined at www.mun.ca/pharmacy.

### 7.2.2.2 Promotion Denied

Promotion Denied means Clear Promotion is not achieved at the end of the Academic year. Promotion Denied will be granted when any of the following criteria are met:

1. A student has obtained a failing grade in any course as outlined in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program and in the Course Descriptions.
2. A student has not maintained professional and ethical behaviour consistent with the Student Code of Conduct as outlined at www.mun.ca/student and with the requirements for conduct and professionalism in the School of Pharmacy as outlined at www.mun.ca/pharmacy.
Notwithstanding the above, the School of Pharmacy may offer the student the option to repeat a course on the grounds of academic difficulties. This may be offered only once during the student's program. This restriction may be waived if it has been demonstrated that the student's academic performance has been adversely affected by factors duly authenticated and acceptable to Committee on Undergraduate Studies of the School of Pharmacy.

### 7.2.2.3 Other Information

To be recommended for graduation, a student must have Clear Promotion after successful completion of all course requirements.

1. Applied Learning courses (PHAR 4910, 5920, 6930):

- A student is permitted to repeat only one Applied Learning course. A student who fails an Applied Learning course on a second attempt will be required to withdraw from the program.
- If a failed grade is received in more than one Applied Learning course, the student will be required to withdraw from the program.
- In certain circumstances (such as violation of the Student Code of Conduct as outlined at www.mun.ca/student), failure of an Applied Learning course may result in the student being required to withdraw from the program.

2. Advanced Pharmacy Practice Experiences courses (PHAR 610P, PHAR 611P):

- Normally, if a student fails an APPE course, Pharmacy's Committee on Undergraduate Studies may permit the student to continue to the student's next scheduled APPE course and require the student to repeat the failed course at a later date. This may extend the duration of the student's program.
- A student is permitted to repeat only one APPE course. A student who fails an APPE course on a second attempt will be required to withdraw from the program.
- If a failed grade is received in more than one APPE course, the student will be required to withdraw from the program.
- In certain circumstances (such as violation of the Student Code of Conduct as outlined at www.mun.ca/student), failure of an Applied Learning course may result in the student being required to withdraw from the program.


### 7.2.3 Student Withdrawal

A student may be required to withdraw from the program at any time, if, in the opinion of the Dean of Pharmacy, the student is unlikely to benefit from continued attendance or if acceptable cause is demonstrated. The Dean will recommend to the Registrar that the student is required to withdraw from the program.

### 7.2.4 Leave of Absence

Upon completion of an Academic year, a student with Clear Promotion may elect to withdraw temporarily from studies. Voluntary withdrawal at other times and for other reasons may be permitted in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Registration. In all cases, the intent to withdraw voluntarily should be discussed with the Dean. At the end of this period, the student, in consultation with the Committee on Undergraduate Studies of the School of Pharmacy, should ensure that sufficient revision and preparatory work is undertaken to allow studies to be resumed readily. In the absence of good cause, any such student who does not resume studies on the specified date may be deemed to have left the program.

## 8 Supplementary Final Examinations

Supplementary examinations will be offered in Pharmacy courses that have a final examination. Please note that supplementary exams in PHAR 2004, PHAR 3111 and PHAR 3006 are at the discretion of the instructor

### 8.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program

1. Supplementary examinations are permitted only in Pharmacy courses that have a final examination.
2. Normally, students receiving a final grade of $45-49 \%$ in a Pharmacy course and a term grade in the course, excluding the original final examination, of at least $50 \%$ may write a supplementary examination.
3. Supplementary examinations will be of similar length, degree of difficulty and weight as the original final examination.
4. Students may write a supplementary examination for any one course only once.
5. No more than three supplementary examinations in Pharmacy courses can be written during the program.
6. Students who wish to write a supplementary examination must apply in writing by completing the "Application for Supplementary Final Examination" form available from the School's website. The completed form should be submitted to the Dean's Office within 48 hours of the official release of grades by the University.
7. Any student writing a supplementary examination may obtain no more than a maximum grade of $65 \%$ in the course. The transcript will indicate that the final grade was earned as a result of a supplementary examination and that the maximum obtainable final grade is $65 \%$.
8. Supplementary examinations will normally be written no later than the first week of the semester immediately following the one in which the course was failed, and will normally coincide with the writing of deferred examinations. Grades for supplementary examinations will be submitted to the Office of the Registrar within one week following the commencement of classes for that semester.

### 8.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program

1. Supplementary examinations are permitted only in Pharmacy courses that have a final examination.
2. Normally, students receiving a final grade of $55-59 \%$ in a Pharmacy course and a term grade in the course, excluding the original final examination, of atleast $60 \%$ may write a supplementary examination.
3. Supplementary examinations will be of similar length, degree of difficulty and weight as the original final examination.
4. Students may write a supplementary examination for any one course only once.
5. No more than three supplementary examinations in Pharmacy courses can be written during the program.

Students who wish to write a supplementary examination must apply in writing by completing the "Application for Supplementary Examination" form available from the School's website. The completed form should be submitted to the Dean's Office within 48 hours of the official release of grades by the University.
7. Any student writing a supplementary examination may obtain a final grade no higher than $60 \%$ in the course. The transcript will indicate that the final grade was earned as a result of a supplementary examination and that the maximum obtainable final grade is 60\%.
8. Supplementary examinations will be written no later than the first week of the semester immediately following the one in which the course was failed, and will normally coincide with the writing of deferred examinations. Grades for supplementary examinations will be submitted to the Office of the Registrar within one week following the commencement of classes for that semester.

## 9 Graduation

Upon meeting the qualifications for any of the programs of the School of Pharmacy, a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/ graduation.

## 10 Waiver of School Regulations

A student has the right to request waiver of School regulations. A student wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

### 10.1 General Information

1. The School reserves the right in special circumstances to modify, alter, or waive any School regulation in its application to individual students where merit and equity so warrant in the judgment of the Committee on Undergraduate Studies of the School. of Pharmacy.
2. All requests must be submitted to the Committee on Undergraduate Studies of the School of Pharmacy for consideration. A student requesting a waiver of a School regulation must submit the request in writing to the Chair of the Committee on Undergraduate Studies of the School of Pharmacy. Medical and/or other documentation to substantiate the request must be provided.
3. Any waiver granted does not reduce the total number of credit hours required for the degree.

## 11 Appeal of Regulations

Any student whose request for waiver of School regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)-Appeal of Decisions.

- An applicant who has been denied admission has the right to appeal this decision of the Committee on Undergraduate Student Admissions of the School of Pharmacy if it is felt by the applicant that the decision was reached on grounds other than those outlined in the Admission Regulations - Doctor of Pharmacy (Pharm.D,), Full-Time Program and Admission Regulations Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program. The appeal should be made in writing within fourteen days of the notification of the decision and should be directed to the Dean of the School. The letter should state clearly and fully the grounds for the appeal. If the Dean of the School, in consultation with the Registrar, judges the grounds to be sufficient, the formal appeals mechanism will be initiated.


## 12 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three Academic years and which are not scheduled to be offered in the current Academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the School.
A student is advised to pay attention to Usage Limitation (UL) for each course to determine its program applicability.
All courses of the School are designated by PHAR and are restricted to students in the School of Pharmacy.
2002 Anatomy and Physiology I provides an overview of human anatomy and physiology throughout the lifespan. It includes aspects of cytology and histology that form a foundation for the practice of pharmacy. The focus will be on developing an understanding of the interrelationships and integration of all systems from the cell to whole organism. Special emphasis is given to the skeletal, muscular, nervous, and endocrine systems.
CR: Nursing 1002
$\mathrm{LH}: 2$; attendance is required
PR: Science 1807 and Science 1808
2003 Anatomy and Physiology II provides an overview of human anatomy and physiology throughout the lifespan. It includes aspects of cytology and histology that form a foundation for the practice of pharmacy. The focus will be on developing an understanding of the interrelationships and integration of all systems from cell to whole organism. Special emphasis is given to the circulatory, respiratory, urinary, digestive, and reproductive systems
CR: Nursing 1012
LH: 2; attendance is required
PR: PHAR 2002, Science 1807 and Science 1808
2004 Introduction to Biochemistry is an introduction to the major organic substances of living organisms, proteins, carbohydrates and lipids: their structure, analysis and biochemical function. Other topics include: enzymes; the biochemistry of membranes, including the plasma membrane and specialized intracellular membranes; and the biochemistry of selected differentiated cells.
CR: Biochemistry 2201 or the former 2101
PR: Chemistry 2400 and Physics 1020 (or 1050), and 1021 (or 1051)
2010 Service Learning requires completion of 20 hours of service in the community in any term within the first year of the program. Students will engage in projects or activities which will benefit both the host organization and the student. It will occur in an approved setting either in the academic community or with an off-campus community group. The goal is to provide
opportunities for the student to develop communication and self-reflective learning skills, acquire new frames of reference and perspectives, and gain an enhanced sense of civic responsibility.
$\mathrm{CH}: 0$
OR: 20 hours of service learning
2201 Pharmaceutics I provides an insight into a number of physicochemical basics and explains them within a pharmaceutical context. The course provides the basic foundation necessary for the study of pharmaceutical dosage forms, pharmacokinetics and bio-pharmaceutics.
$\mathrm{LH}: 3$; attendance is required
PR: Mathematics 1000 and 1001; and Chemistry 1050 and 1051, or Chemistry 1200 and 1001, or equivalent; Science 1807 and Science 1808

2202 Pharmaceutics II is designed to provide the student with an understanding of pharmaceutical dosage forms and their applications. It applies the principles taught in Pharmaceutics I to understand the design and components of the different pharmaceutical preparations.
LH: 3; attendance is required
PR: PHAR 2201, Science 1807 and Science 1808
2250 Pharmacy Practice I begins the acquisition and application of the knowledge the knowledge, skills, and attitudes necessary for pharmacy practice. The course will include an introduction to calculations, technical skills and the legal and regulatory framework of pharmacy practice. Application will occur in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.
$A R$ : attendance is required in practice sessions
CH: 5
CO: all Academic Term 1 Pharmacy courses, with the exception of PHAR 2010
OR: practice sessions 2 hours per week
PR: Science 1807 and Science 1808
2251 Pharmacy Practice II continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. The legal and professional framework of pharmacy practice, patient counselling, and technical skills will be emphasized. Application will take place in real and simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking and teamwork at a level appropriate for the year of study to in order to pass the course.
AR: attendance is required in practice sessions
CH: 5
CO: all Academic Term 2 Pharmacy courses, with the exception of PHAR 2010

[^25]
## LC: 2

OR: practice sessions 3 hours per week
PR: PHAR 2250; Science 1807 and Science 1808
2610 Health Systems provides an introduction to the Canadian healthcare system, its development, history, structure, and financing. The federal and provincial governments' involvement in the healthcare system and health policy will be presented. The roles and responsibilities of the pharmacist within healthcare will also be examined

2620 Social and Ethical Behaviour introduces the social and cultural factors and determinants that influence health in Canada, and their ethical implications. Theoretical approaches from a social perspective, including value systems in Canada, ethical dilemmas and the role of ethics in pharmacy practice will be discussed.
CH: 2
LC: 2
PR: PHAR 2610
3006 Immunology (same as Biochemistry 4105 and Biology 4200) is an introduction to the cells and organs of the innate and adaptive immune systems. The molecular and cellular basis of allergy, autoimmunity, vaccination and cancer immunology will also be discussed.
CR: Biochemistry 4105, Biology 4200, and the former PHAR 4105 PR: PHAR 2004

302W Structured Practice Experience II is a structured practice experience in hospital pharmacy after completion of the second year which will provide an opportunity for students to apply their technical skills and introduce them to patient care activities. The practical experience is normally comprised of four weeks during May/June.
AR: attendance is required
$\mathrm{CH}: 0$
LC: 0
PR: successful completion of all courses in Academic Terms $3 \& 4$ of the program
UL: applicable only to the Bachelor of Science (Pharmacy) program
305P Pharmacy Practice Experience I provides six weeks (240 hours) of practice experience in a community pharmacy. The focus will be on the legal and regulatory framework governing pharmacy practice, prescription processing, gathering and assessing patient information, patient education, drug information, health promotion, and quality assurance. Students will apply their knowledge and skills in the provision of patient care. Effective communication skills, professionalism, and teamwork are expected.
AR: attendance is required
PR: all Academic Term 4 \& 5 courses
3111 General Biochemistry covers the catabolism of carbohydrates, lipids and amino acids. Mitochondria, chloroplasts and ATP synthesis. Biosynthesis of carbohydrates and lipids. Metabolic specialization of differentiated cells and tissues. Integration of metabolism.
CR: Biochemistry 3106, 3206
PR: one of PHAR 2004, Biochemistry 2201 or the former 210
3250 Pharmacy Practice III continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. The focus will include patient assessment, care plan development, counselling, follow-up, interprofessional collaboration, and communication with special patient populations. Application will occur in real and simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study to pass the course.
AR: attendance is required
CH: 5
CO: all Academic Term 4 Pharmacy courses
LC: 2
OR: practice sessions 3 hours per week
PR: PHAR 2251; Science 1807 and Science 1808
3251 Pharmacy Practice IV continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. Thís course will build on pharmacy practice concepts and will emphasize patient safety. Application will take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.
AR: attendance is required
$\mathrm{CH}: 5$
CO: all Academic Term 5 Pharmacy courses
LC: 2
PR: PHAR 3250; Science 1807 and Science 1808
3270 Pharmacotherapy I introduces pharmacotherapeutic management of common diseases and effective management of patients' drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-
pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include drug interactions, gastroenterological conditions, musculoskeletal conditions, nutrition, and special populations.
CH: 5
CO: PHAR 3250, 3801, and 3805
LC: 5
3271 Pharmacotherapy II continues the discussion of pharmacotherapeutic management of common diseases and effective management of patients' drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include cardiovascular, dermatological, respiratory, and infectious diseases.
CH: 4
CO: PHAR 3251
LC: 4
PR: PHAR 3270, 3801, and 3805
3410 Leadership and Health Promotion focuses on the roles of leadership, advocacy, and health promotion in pharmacy to improve patient care. Insight into leadership skills and the roles of educating, advocating, and promoting health to patients, families, communities, and society will be discussed. The change process and the leader's role in change will be introduced.

3801 Pathophysiology 1 examines the nature of disease, causes and effects, and alterations in structure and function of cells. Topics may include cardiovascular, dermatological, gastrointestinal, and respiratory diseases.
CH: 2
CO: PHAR 3270 and 3805
LC: 2
PR: PHAR 2003
3805 Pharmacology f provides an introduction to the general principles of pharmacology including dose-response relationships, drug-receptor interactions, absorption, distribution, metabolism, and elimination of drugs. The focus will be on the pharmacological basis of the action of drugs leading to therapeutic effects, as well as adverse effects. Topics may include drugs used in the management of cardiovascular, gastrointestinal, respiratory diseases, and anti-inflammatory drugs
CO: PHAR 3270 and 3801

## PR: PHAR 2003

3810 Microbiology of Infectious Diseases examines the various types of micro-organisms (bacterial, viral, parasitic, and fungal), microbial growth, and their relationship to human diseases. The classifications of their morphology, mode of reproduction, and the metabolic process will be discussed
$\mathrm{CH}: 2$

3825 Medicinal Chemistry examines the functional group recognition and properties of drugs, drug-receptor interactions, structure activity relationships, and rational drug design. The relationship between the chemical structure of a drug and its binding affinity toward intended target enzymes or receptors, and its pharmacological activity, will be discussed.
CR: the former PHAR 3203 and the former 3204
PR: Chemistry 2401 and PHAR 3111
4008 Chemotherapy presents the principles of infectious diseases and cancer chemotherapy. Topics to be explored include molecular structure profiles in relation to mechanism of action, drug resistance, and toxicity of antimicrobial, antiviral, and antineoplastic agents. Antimicrobial activity/ spectrum of activity of antibacterials, antifungals, antimalarial, antituberculosis, and antiviral/antiretroviral agents will be discussed. The classification and mechanism of action of cancer chemotherapeutic agents will be presented. Pharmacokinetic considerations, adverse effects/toxicity, and drug interactions will be explored for these agents.
CH: 2
CO: PHAR 4401
LC: 2
OR: tutorials 1 hour per week
PR: Medicine 4300, PHAR 3006, the former 3009, the former 3103, the former 3203, and the former 3204
UL: applicable only to the Bachelor of Science (Pharmacy) program
403W Structured Practice Experience III is a structured practice experience in community pharmacy after completion of the third year which will provide an opportunity for students to apply their technical skills and practice and participate in patient care activities. The practical experience is normally comprised of four weeks during May/June.
AR: attendance is required
CH: 0
LC: 0
PR: successful completion of all courses in Academic Terms $5 \& 6$ of the
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
program
UL: applicable only to the Bachelor of Science (Pharmacy) program
406P Pharmacy Practice Experience II provides two weeks ( 80 hours) of practice experience in a hospital pharmacy practice setting. The focus will be on the operations of a hospital pharmacy, including drug distribution, policies and procedures, and communicating with other healthcare professionals. Students will apply their knowledge and skills in the provision of pharmacy services. Effective communication skills, professionalism, and teamwork are expected.
AR: attendance is required
CH: 1
PR: all Academic Term 7 \& 8 courses
407P Pharmacy Practice Experience III provides four weeks (160 hours) of practice experience in a direct patient care setting. Emphasis will be on continuing to develop patient care skills by working with a variety of patients and the healthcare team to appropriately identify, prevent, and resolve drugrelated problems. Effective communication skills, professionalism, and teamwork, are expected.
AR: attendance is required
CH: 2
PR: all Academic Term 7 \& 8 courses
4201 Applied Pharmacokinetics (same as the former PHAR 3206) is an introduction to biopharmaceutical and pharmacokinetic principles used in the selection, dosing, monitoring and evaluation of drug therapy. Application of these principles in evaluating drug literature and developing drug dosage regimens of selected classes of drugs for individual patients will be discussed.
CR: the former PHAR 3206
PR: Medicine 4300, PHAR 2202 and the former 3009
UL: applicable only to the Bachelor of Science (Pharmacy) program
4250 Pharmacy Practice V continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. Critical appraisal, patient safety, and interprofessional collaboration will be emphasized. Application take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.
AR: attendance is required in practice sessions
CH: 5
CO: all Academic Term 7 Pharmacy courses
LC: 2
OR: practice sessions 3 hours per week
PR: PHAR 3251; Science 1807 and Science 1808
4251 Pharmacy Practice VI continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. Sterile product preparation, drug information, patient safety, and calculations relevant to hospital practice will be introduced. Critical appraisal and interprofessional collaboration will continue. Application will take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study to pass the course. AR: attendance is required in practice sessions
CH: 5
CO: all Academic Term 8 Pharmacy courses
LC: 2
OR: practice sessions 3 hours per week
PR: PHAR 4250; Science 1807 and Science 1808
4270 Pharmacotherapy III continues the discussion of pharmacotherapeutic management of common diseases and effective management of the patient's drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include autoimmune, infectious, and musculoskeletal diseases.
CH: 4
$\mathrm{CO}: ~ \mathrm{PH}$
LC: 4
PR: PHAR 3006, 3271, and 3810
4271 Pharmacotherapy IV continues the discussion of pharmacotherapeutic management of common diseases and effective management of patients' drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include cardiovascular, endocrine and renal disease, and women's and men's health.
CH: 6
CO: PHAR 4251
LC: 6
PR: PHAR 4270, 4802, and 4810

4302 Patient Care II discusses the principal roles of health systems and health policy with a special emphasis on pharmaceutical policy and its impact on the profession, the public and on the delivery of pharmaceutical care. The principles of health promotion and the role of the pharmacist will be discussed. Students will gain knowledge about health challenges facing society, how education affects health, the roles of the pharmacist in educating and promoting health to patients.
CH: 1
CR: the former PHAR 4301 and the former 3501
PR: the former PHAR 3301, and the former 2101 and the former 2102
UL: applicable only to the Bachelor of Science (Pharmacy) program
4401 Therapeutics I is a part of a series that looks at the therapeutic management of common diseases. Topics may include but are not restricted to infectious diseases, hematology/oncology, and dermatology. For each disease state discussion will centre around several key issues including: the establishment of desired therapeutic outcomes; development of appropriate pharmacological and non-pharmacological therapeutic alternatives; factors to be considered to aid in the selection of an individualized therapeutic regimen; and the development of a monitoring plan to evaluate efficacy and safety.
CH: 6
CO: PHAR 4008 and 4201
LC: 6
OR: tutorials 2 hours per week; attendance is required
PR: Medicine 4300, PHAR 3006 and the former 3009
UL: applicable only to the Bachelor of Science (Pharmacy) program
4402 Therapeutics II is a part in a series that looks at the therapeutic management of common diseases. Topics may include but are not restricted to women's health, mens' health, gastroenterology, musculoskeletal, neurological, respiratory disorders and transplantation. For each disease state discussion will centre around several key issues including: the establishment of desired therapeutic outcomes; development of appropriate pharmacological and non-pharmacological therapeutic alternatives; factors to be considered to aid in the selection of an individualized therapeutic regimen; and the development of a monitoring plan to evaluate efficacy and safety.
CH: 6
LC: 6
OR: tutorials 2 hours per week; attendance is required
PR: PHAR 4401
UL: applicable only to the Bachelor of Science (Pharmacy) program
4420 Pharmacy Management I introduces the principles of management and leadership as they relate to pharmacy practice. Topics will include the pharmacy practice environment, human resources management, financial management, operations management, marketing, risk management, quality control and improvement, and effective communications.

4503 Pharmacy Administration introduces students to the basic principles of management as it relates to pharmacy practice. Topics will include human resources and financial management, marketing, strategic planning and the principles and issues associated with safe and appropriate drug distribution. These will be discussed from both a community and an institutional practice focus.
UL: applicable only to the Bachelor of Science (Pharmacy) program
4504 Pharmacy Research and Evaluation I introduces the biostatistical, pharmacoepidemiologic and pharmacoeconomic concepts and develops the skills necessary to the practice of research and evaluation methods in applied pharmacy. The understanding of such methods is an important prerequisite in the critical appraisal of the health literature and the undertaking of evidence-based clinical practice.
CR: the former PHAR 4501
UL: applicable only to the Bachelor of Science (Pharmacy) program
4505 Pharmacy Research and Evaluation II introduces students to principles of critical appraisal and provides opportunities to apply these principles to critique and evaluate current medical literature. Students will be assigned to a tutorial group, which will meet twice during the term to critically appraise at least two recently published studies (journal club). Emphasis will be placed on appropriate application of critical appraisal skills and group discussion of impact of study findings on clinical practice. In addition, this course will also discuss drug utilization reviews and evaluations and the role of the pharmacist, as well as adverse drug event reporting and the role of the pharmacist.
CH: 1
CR: the former PHAR 4502
LC: 1
OR: tutorials 1 hour per week; attendance is required
PR: PHAR 4504 or equivalent
UL: applicable only to the Bachelor of Science (Pharmacy) program
4620 Applied Health Research introduces the fundamentals of research design, methods, and appraisal necessary to develop the skills to analyze and interpret clinical research. Topics include randomized clinical trials, observational studies, and pharmacoeconomic evaluations. Emphasis will be placed on making valid inferences about drug safety and effectiveness

[^26]from scientific research. Principles of critically appraising the medical literature will be introduced.
CO: Statistics 2550
4650 Pharmacy Skills continues the development of the skills necessary for pharmacy practice in order to meet the educational outcomes for the third year of the pharmacy program. Students will continue to develop abilities in communication, professionalism, critical thinking, problem-solving, teamwork and self-directed learning. Students will participate in practice sessions necessary to develop an understanding of and skills required in patient assessment. Students will build on their pharmacist care skills to meet patients' drug-related needs in more complex patient scenarios, drug information skills to assess information needs, and medication preparation and dispensing skills to optimize safe and accurate medication delivery. Scenarios will relate to the courses of study in the third year and draw on material studies in earlier years of the program. Students will participate in interprofessional education (IPE) modules with students from other health related programs when such modules are available.
CO: all Academic Term 5 Pharmacy courses
CR: the former PHAR 4150
LC: 0
OR: practical sessions 3 hours per week; tutorials 1 hour per week; attendance is required
PR: Science 1807 and Science 1808
UL: applicable only to the Bachelor of Science (Pharmacy) program
4651 Pharmacy Skills continues the development of the skills necessary for pharmacy practice in order to meet the educational outcomes for the third year of the pharmacy program. Students will continue to develop abilities in communication, professionalism, critical thinking, problem-solving, teamwork and self-directed learning. Students will participate in sessions that focus on ethical issues in pharmacy practice and communication with health care providers. Students will build on their patient assessment and pharmacist care skills to meet patients' drug-related needs in more complex patient scenarios and will use critical appraisal skills to respond to clinical questions. Scenarios will relate to the courses of study in the third year and draw on material studied in earlier years of the program. Students will participate in interprofessional education (IPE) modules with students from other health related programs when such modules are available.

## CO: all Academic Term 6 Pharmacy courses

CR: the former PHAR 4151
LC: 0
OR: practical sessions 3 hours per week; tutorials 1 hour per week;
attendance is required
PR: PHAR 4650; Science 1807 and Science 1808
UL: applicable only to the Bachelor of Science (Pharmacy) program
4802 Pathophysiology II examines the nature of disease, causes and effects, and alterations in structure and function of cells. Topics may include endocrine disorders, renal, rheumatological and neurological diseases, neoplasia, and women's and men's health.
CO: PHAR 4270 and 4810
PR: PHAR 3801
4810 Pharmacology II will focus on the pharmacological basis of the action of drugs leading to therapeutic effects, as well as adverse effects. Topics may include drugs used in the management of infectious diseases, the endocrine system, and inflammatory diseases, as well as hormonal drugs and analgesics.
CH: 2
CO: PHAR 4270 and 4802
LC: 2
PR: PHAR 3006, 3805, and 3810
4820 Pharmacokinetics is an introduction to the biopharmaceutical and pharmacokinetic principles used in the selection, dosing, and monitoring of drug therapy. The concepts of absorption, distribution, metabolism and elimination, pharmacokinetic and pharmacodynamics mechanisms of drug interactions, and the importance of drug monitoring will be explored.
CH: 2
LC: 2
PR: PHAR 2202 and 3805
4860 Pharmacogenomics and Biotechnology provides insight into the development of biopharmaceuticals. Formulation, stability, dispensing, and clinical applications of biotechnology derived protein/peptide drugs will be discussed. The fundamental concepts of pharmacogenetics and pharmacogenomics will be explored. A focus will be on understanding how personalized drug therapy, based on the genetic profile of individuals, can optimize drug therapy and patient care.
CH: 2
LC: 2
PR: PHAR 2202 and 3111
4900 Clinical Skills I is an on-campus, three-day (21 hours) orientation to the fundamental knowledge and skills for advanced practice. Topics such as informatics, communication, and patient assessment may be explored. This course may commence outside the semester start and end dates.
AR: attendance is required

CH: 2
CO: PHAR 4901 and 4902
UL: applicable only to the Doctor of Pharmacy for Working Professionals
4901 Essentials of Pharmacy Practice provides the foundational principles and skills of pharmacy practice such as the provision of patient-centred care, pharmacokinetics, and social justice. The pass grade is $60 \%$.
CH: 4
CO: PHAR 4900 and 4902
UL: applicable only to the Doctor of Pharmacy for Working Professionals
4902 Pharmacy Management and Leadership explores the principles of change management and leadership as they relate to pharmacy practice. Topics may include the business environment, financial management, continuous quality improvement, business marketing and promotion, human resources management, pharmacy services implementation, effective pharmacy operations, and technology in pharmacy practice. The pass grade is $60 \%$.
CH: 2
CO: PHAR 4900 and 4901
UL: applicable only to the Doctor of Pharmacy for Working Professionals
4903 Evidence-Based Practice integrates advanced drug information and critical evaluation of the medical literature. Students will apply their knowledge of pharmacy practice research and evidence-based practice to inform therapeutic decision-making. The pass grade is 60\%.
PR: PHAR 4900
UL: applicable only to the Doctor of Pharmacy for Working Professionals
4910 Applied Learning I focuses on the application of leadership skills to implement change in practice through education and advocacy. Students will demonstrate their learning through the completion of applied learning activities at their practice sites.
PR: PHAR 4902
UL: applicable only to the Doctor of Pharmacy for Working Professionals
500X Structured Practice Experience IV provides experience in clinical practice. Students will participate as members of the health care team. They will be responsible for providing pharmaceutical care to patients. Activities will include attending patient care rounds, providing in-services and drug information, and participating in case presentations. The structured practice experience is comprised of two six week modules.
AR: attendance is required
CH: 18
PR: successful completion of all course requirements for the degree and Clear Promotion
UL: applicable only to the Bachelor of Science (Pharmacy) program
508P Pharmacy Practice Experience IV provides two weeks ( 80 hours) of practice experience during Academic Term 11 in an institutional direct patient care setting. This course serves as a transition to the Advanced Pharmacy Practice Experience. Emphasis will be on developing independence in providing patient care under the mentorship of a preceptor or of an advanced practice pharmacy student. Effective communication skills, professionalism, and teamwork are expected.
AR: attendance is required
CH: 1
PR: all Academic Term 10 courses
5250 Pharmacy Practice VII continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for pharmacy practice. Critical appraisal, patient safety, and interprofessional collaboration will be emphasized. Students will be expected to demonstrate increased independence during the application of knowledge and skills in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.
AR: attendance is required in practice sessions
CH: 5
CO: all Academic Term 10 Pharmacy courses
LC: 2
OR: practice sessions 3 hours per week
PR: PHAR 4251; Science 1807 and Science 1808
5251 Pharmacy Practice VIII is the final course in the series where students acquire, develop, and apply the knowledge, skills, and attitudes necessary for pharmacy practice. Application of knowledge and skills will occur in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.
AR: attendance is required in practice sessions
$\mathrm{CH}: 4$
CO: all Academic Term 11 Pharmacy courses
LC: 2
OR: practice sessions 3 hours per week; course runs over 10 weeks to accommodate PHAR 508P
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; $\mathrm{OR}=$ Other requirements of the course such as tutorials, practical sessions, or seminars; $\mathrm{PR}=$ Prerequisite(s); UL = Usage limitation(s).

## PR: PHAR 5250; Science 1807 and Science 1808

5270 Pharmacotherapy $\mathbf{V}$ is the final course in the series that examines the pharmacotherapeutic management of common diseases and effective management of the patient's drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include neurological, oncological, and addictions and mental health conditions.
CH: 6
CO: PHAR 5815
LC: 6
PR: PHAR 4271
5271 Advanced Pharmacotherapy expands and integrates the knowledge and skills acquired from the Pharmacotherapy series of courses through application to complex patient scenarios. Critical thinking skills necessary for optimizing pharmacotherapy in a variety of patient care situations will be the focus of the course.
CH: 5
LC: 6
OR: course runs over 10 weeks to accommodate PHAR 508P
PR: PHAR 5270
5275 Symposium in Pharmacy is a forum for students to research, develop and deliver formal presentations related to pharmacy practice. Students will be expected to interpret, synthesize, and present information effectively. The presentations will allow for application of knowledge and reflection on content.
AR: attendance is required
CH: 2
CO: PHAR 5251
LC: 2
5301 Clinical Toxicology covers the toxicology and clinical management of toxicity associated with common medications.
CH: 2
CO: PHAR 5401
LC: 2
UL: applicable only to the Bachelor of Science (Pharmacy) program
5302 Patient Care III focuses on pharmaceutical care considerations in special patient populations (e.g., geriatrics, neonates, pediatrics, pregnancy and lactation, critically ill, etc.). Implementation of pharmaceutical care in hospital, ambulatory and community practice settings will be discussed.
CO: PHAR 5401
OR: tutorials 1 hour per week; attendance is required
UL: applicable only to the Bachelor of Science (Pharmacy) program
5401 Therapeutics III is part in a series that looks at the therapeutic management of common diseases. Topics may include but are not restricted to endocrine, psychiatric, renal and cardiovascular disorders. For each disease state discussion will centre around several key issues including: the establishment of desired therapeutic outcomes; development of appropriate pharmacological and non-pharmacological therapeutic alternatives; factors to be considered to aid in the selection of an individualized therapeutic regimen; and the development of a monitoring plan to evaluate efficacy and safety.
CH: 6
OR: tutorials 2 hours per week
PR: PHAR 4402
UL: applicable only to the Bachelor of Science (Pharmacy) program
5430 Pharmacy Management II prepares students for the various roles of management in pharmacy practice, regardless of position or practice setting. Management principles including communications, leadership, finance, human resources management, marketing, and promotion will be applied through demonstrating leadership, business planning, and pharmacy service


5506 Pharmacy Research and Evaluation III (same as the former PHAR 5501) discusses the principles of critical appraisal and provides opportunities to apply these principles to critique and evaluate current medical literature. Students will be assigned to a tutorial group, which will meet twice during the term to critically appraise at least two recently published studies. Emphasis will be placed on appropriate application of critical appraisal skills and group discussion of impact of study findings on clinical practice.
CH: 1
CR: the former PHAR 5501
LC: 0
OR: tutorials 1 hour per week
PR: PHAR 4505 or equivalent

## UL: applicable only to the Bachelor of Science (Pharmacy) program

5640 Social Justice and the Pharmacist will enable students to critically analyse the role of social justice as an integral part of the practice of pharmacy. The course will include a focus on the interconnectedness of health equity with global contexts that include social class, ethnicity, gender, ability, and mental health. Critical thinking skills will be used to examine complex health and social issues.
CH: 2
LC: 2
5650 Pharmacy Skills (same as the former PHAR 5150) continues the development of the skills necessary for pharmacy practice in order to meet the educational outcomes for the fourth year of the pharmacy program. Students will continue to develop abilities in communication, professionalism, critical thinking, problem-solving, teamwork and selfdirected learning. Students will build on their pharmacist care skills to meet patients' drug-related needs in patients with multiple drug related problems. Refinement of verbal and written communication skills will be focus. Scenarios will relate to the courses of study in the fourth year and draw on material studies in earlier years of the program. Students will participate in interprofessional education (IPE) modules with students from other health related programs when such modules are available.
CO: all Academic Term 7 Pharmacy courses
CR: the former PHAR 5150
LC: 0
OR: practical sessions 3 hours per week; tutorials 1 hour per week;

## attendance is required

PR: Science 1807 and Science 1808
UL: applicable only to the Bachelor of Science (Pharmacy) program1
5815 Pharmacology III is the final course in the series that focuses on the pharmacological basis of the action of drugs leading to therapeutic effects, as well as adverse effects. Topics may include drugs used in the management of oncological, mental health, and neurological conditions as well as drugs of abuse.
CH:2
CO: PHAR 5270
LH: 2
PR: PHAR 4810
5830 Applied Pharmacokinetics discusses pharmacokinetic principles of drug selection, dosing, and monitoring in the clinical setting for individualization of drug therapy
$\mathrm{CH}: 2$
$\mathrm{LH}: 2$

## PR: PHAR 4820

5901 Pharmaceutical Care I integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for diseases of the cardiovascular system. The pass grade is $60 \%$.
PR: PHAR 4903
UL: applicable only to the Doctor of Pharmacy for Working Professionals
5902 Pharmaceutical Care II integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for renal, digestive, and oncological diseases. The pass grade is $60 \%$.
PR: PHAR 4903
UL: applicable only to the Doctor of Pharmacy for Working Professionals
5903 Pharmaceutical Care III integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for diseases of the protective, structural, and endocrine systems. The pass grade is $60 \%$.
PR: PHAR 4903
UL: applicable only to the Doctor of Pharmacy for Working Professionals
5904 Pharmaceutical Care IV integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for respiratory and infectious diseases. The pass grade is $60 \%$.
PR: PHAR 4903
UL: applicable only to the Doctor of Pharmacy for Working Professionals
5905 Pharmaceutical Care V integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for neurological disorders and mental health conditions. The pass grade is $60 \%$.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: PHAR 4903
UL: applicable only to the Doctor of Pharmacy for Working Professionals
5920 Applied Learning II focuses on the principles of medication safety, medication use evaluation, adverse drug events, and medication errors and incident reporting. Students will demonstrate their learning through the completion of applied learning activities at their practice sites.
PR: PHAR 4910 and at least one of PHAR 5901, 5902, 5903, 5904, 5905
UL: applicable only to the Doctor of Pharmacy for Working Professionals
605P Advanced Pharmacy Practice Experience: Direct Patient Care is an eight week ( 320 hours) practice experience completed during the final year of the program (following Academic Term 11). Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.
AR: attendance is required
CH: 12
PR: all Academic Term 10 \& 11 courses
606P Advanced Pharmacy Practice Experience: Acute Care Hospital is an eight week ( 320 hours) practice experience where patient care is provided in an acute care hospital setting and is completed during the final year of the program (following Academic Term 11). Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.
AR: attendance is required
CH: 12
PR: all Academic Term 10 \& 11 courses
607P Advanced Pharmacy Practice Experience: Community Pharmacy is an eight week ( 320 hours) practice experience where patient care is provided in a community pharmacy setting and is completed during the final year of the program (following Academic Term 11). Students will be expected to demonstrate leadership in the responsible provision of patient care by applying expanded scope of practice skills, as well as communicating and collaborating with patients, the pharmacy team, other health professionals, and the public while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.
AR: attendance is required
CH: 12
PR: all Academic Term 10 \& 11 courses
608P Advanced Pharmacy Practice Experience: Elective is a six week (240 hours) experience completed during the final year of the program (following Academic Term 11). The experience may occur in either a direct or non-direct patient care setting. Options include patient care, research, health policy, drug information, teaching/education, advocacy, and administration. Placements may vary from year to year depending upon site and preceptor availability.

AR: attendance is required
CH: 9
PR: all Academic Term 10 \& 11 courses
610P Advanced Pharmacy Practice Experience: Ambulatory Care is a six week ( 240 hours) practice experience completed during the final year of the program. Students will develop their medication therapy management skills and pharmaceutical care in an ambulatory care setting. Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.
AR: attendance is required
CH: 9
PR: PHAR 6900, 6930 and at least four of PHAR 5901, 5902, 5903, 5904, 5905
UL: applicable only to the Doctor of Pharmacy for Working Professionals
611P Advanced Pharmacy Practice Experience: Inpatient Care is a six week ( 240 hours) practice experience completed during the final year of the program. Students will develop the essential skills necessary to provide direct patient care in an inpatient setting. Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.
AR: attendance is required
CH: 9
PR: PHAR 6900, 6930 and at least four of PHAR 5901, 5902, 5903, 5904, 5905
UL: applicable only to the Doctor of 'Pharmacy for Working Professionals
6900 Clinical Skills II is an on-campus, three-day ( 21 hours) introduction to the Advanced Pharmacy Practice Experience component of the program. The focus will be on topics that enable students to practice to their full scope. Students will continue to demonstrate skills in communication, patient assessment, and documentation. This course may commence outside the semester start and end dates.
AR: attendance is required
CH: 9
CO: PHAR 6930
PR: PHAR 4900
UL: applicable only to the Doctor of Pharmacy for Working Professionals
6930 Applied Learning III focuses on the expansion of skills in patient assessment, communication, documentation, and interprofessional collaboration through the provision of patient-centred care. Students will demonstrate their learning through the completion of applied learning activities at their practice sites.
CO: PHAR 6930
PR: PHAR 5920 and at least three of PHAR 5901, 5902, 5903, 5904, 5905
UL: applicable only to the Doctor of Pharmacy for Working Professionals



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Dean
Abrahams, M., B.Sc.(Hons.) Western, M.Sc. Queen's, Ph.D. Simon Fraser, Professor of Biology; Joint appointment with the Department of Ocean Sciences

Up-to-date personnel listings are available at www.mun.ca/science/contacts and www.mun.ca/science.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 Faculty Description

The Faculty of Science encompasses nine academic departments: Biochemistry, Biology, Chemistry, Computer Science, Earth Sciences, Mathematics and Statistics, Ocean Sciences, Physics and Physical Oceanography, and Psychology. Departments offer programs leading to general and honours degrees. A number of specialized and joint programs are also offered, as well as Bachelor of Science degree programs delivered by the Departments of Geography and Economics. Selected students can complete the first two years of Acadia University's Bachelor of Science in Nutrition (Dietetics option) at Memorial University of Newfoundland. In addition to educational programs, research is a most important aspect of the Faculty of Science. As such, the Faculty is in a position to generate new knowledge by the pursuit of high quality research and to foster economic development through cooperative research and technology transfer with the private sector. The Faculty of Science is the scientific training ground for all undergraduates at the University. Memorial University of Newfoundland's science graduates are in demand by science-based industries throughout the country. Our Faculty excels in research and in its commitment to effective teaching and delivery of quality educational programs.
Additional information regarding the Faculty of Science is available at www.mun.ca/science.
Information regarding the Centre for Earth Resources Research (CERR) and the Ocean Sciences Centre (OSC) is available under General Information, Centre for Earth Resources Research (CERR), and General Information, Ocean Sciences Centre, respectively.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/. For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

## 4 Degree Regulations

Students must meet all regulations of the Faculty of Science in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/. Upon meeting the qualifications for any of the programs of the Faculty of Science a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation "form. This form may be obtained on-line at the Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar.

### 4.1 Programs in the Faculty of Science

1. The Faculty of Science offers a variety of programs which lead to a General Degree of Bachelor of Science or an Honours Degree of Bachelor of Science. These programs consist of a minimum of 120 credit hours in courses which include the following:
a. the Core Requirements, as described under Core Requirements and Academic Advising,
b. a Program of Study, as described under Programs of Study for the General Degree of Bachelor of Science and Programs of Study for the Honours Degree of Bachelor of Science, as part of which one or more Major programs shall be completed, and
c. a number of additional courses, as described under Electives.
2. In conjunction with the Faculty of Humanities and Social Sciences, the Faculty of Science offers the Joint Degrees of Bachelor of Science and Bachelor of Arts, which simultaneously leads to both a General Degree of Bachelor of Science and a General Degree of Bachelor of Arts.
3. The Faculty of Science also offers a number of Minor programs, as described under Minor Programs in the Faculty of Science. These are available to students completing a General Degree of Bachelor of Science or an Honours Degree of Bachelor of Science, but may also be undertaken by students in other degree programs should the regulations of those programs permit it.
4. A Major or a Minor consists, in part, of an approved concentration of courses in a single subject area, known respectively as the Major subject or Minor subject. These subject areas may include: Biochemistry, Biology, Chemistry, Computer Science, Earth Sciences, Economics, Geography, Mathematics and Statistics, Ocean Sciences, Physics, or Psychology.
5. For the purposes of a General Degree of Bachelor of Science or an Honours Degree of Bachelor of Science, a student may complete at most one Major program from each department which offers more than one, and may not complete a Minor program from the department of any of the student's Major programs.
6. When a Major program may be completed both as part of the Degree of Bachelor of Science and the Degree of Bachelor of Arts, students are free to choose the degree program they wish to follow and may change from one to the other; however, they may not obtain both degrees in the same Major program at this University.

### 4.2 Admission

### 4.2.1 Admission to the General Degree of Bachelor of Science

1. Declaration of the General Degree of Bachelor of Science may be made as part of a student's application for admission to the University, subject to the general undergraduate requirements for admission or readmission, or by current students by means of the Declaration/Change of Academic Program form.
2. A student who intends to complete the General Degree of Bachelor of Science must declare one or more Majors. This declaration is made by formal application to each department which administers one of the intended Major subjects, known as the Major department(s).
a. Declaration of one or more Majors may normally be made upon the successful completion of 30 credit hours in courses, which must include those courses set forth under Core Requirements and Academic Advising. However, additional requirements for the declaration of certain Majors may be imposed by the corresponding Program Regulations.
b. Declaration of a Major may be made using the Declaration/Change of Academic Program form as described above. Certain Majors may additionally or alternatively require the submission of an appropriate Departmental Application for Admission form.
c. Admission to certain Major programs is limited and competitive.
d. Before declaring a Major, a student is strongly encouraged to consult with each Major department and/or the Senior Faculty Advisor of the Faculty of Science.
e. A student may change Majors or add an additional Major, provided acceptance has first been received to the new Major program to which application is being made.

### 4.2.2 Admission to the Honours Degree of Bachelor of Science

1. A student who wishes to be admitted to an Honours program must submit an Application for Admission to Honours Program form, which is available at www.mun.ca/regoff/Application-Honours-Program-07-18.pdf.
a. This form shall be submitted to each Major department, and to the Office of the Registrar, not earlier than the first semester following the completion of 60 credit hours, and not later than the final date set for the application to graduate with the Honours Degree.
b. A student must complete all of the Core Requirements before seeking admission to an Honours program.
2. A student who has been awarded a General Degree of Bachelor of Science may convert it to an Honours Degree of Bachelor of Science by submitting an Application for Admission to Honours Program form as described above, and by completing all of the requirements for the Honours Degree as outlined in these regulations.

### 4.2.3 Admission to a Minor Program in the Faculty of Science

Declaration of a Minor program in the Faculty of Science may be made by means of the Declaration/Change of Academic Program form, which is available at www.mun.ca/regoff/registration/DeclarationChange_AcadProg_ArtsSci.pdf. The department which administers the intended Minor subject is known as the Minor department.

### 4.3 Core Requirements and Academic Advising

1. A candidate for the General Degree of Bachelor of Science or the Honours Degree of Bachelor of Science shall complete the Core Requirements, which consist of the following:
a. 6 credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses,
b. 6 credit hours in Mathematics and Statistics courses, and
c. 6 credit hours in courses from each of two subject areas listed under Programs in the Faculty of Science other than Mathematics and Statistics.
2. Candidates for the General Degree of Bachelor of Science or the Honours Degree of Bachelor of Science, as well as students enrolled in a Minor program in the Faculty of Science, are strongly encouraged to consult regularly with the Head (or delegate) of each Major department and Minor department to discuss course registrations, to ensure compliance with all relevant academic regulations, and to seek advice regarding programs suitable to their particular needs.

### 4.4 Programs of Study for the General Degree of Bachelor of Science

1. The Program of Study for the General Degree of Bachelor of Science is determined by the student's declared Major(s).
a. When a student has declared a single Major, that student's Program of Study shall consist of the requirements for the corresponding Major program, as set forth in the Program Regulations.
b. When a student has declared more than one Major in a combination for which a Joint Major program exists, as set forth in the Joint Program Regulations, that student's Program of Study shall consist of the requirements for the Joint Major program.
c. When a student has declared more than one Major in a combination for which no corresponding Joint Major program exists, that student's Program of Study shall consist of the requirements for each of the respective Major programs, called a Double Major program.
2. The Program of Study for a General Degree shall normally require the student to complete not fewer than 36 credit hours nor more than 45 credit hours in courses from each of the Major subjects, except in cases where it has been deemed that an appropriate rationale exists to warrant the requirement of an extraordinary number of credit hours.
3. A Program of Study may require the student to complete additional courses from subject areas other than the Major subject(s).
4. A student's Program of Study shall also include such additional requirements of each Major department as are approved by the Senate and printed in the Calendar.
5. At least 15 credit hours in courses from each Major subject at the 3000-level or above must be completed at this University.

### 4.5 Programs of Study for the Honours Degree of Bachelor of Science

An Honours Degree of Bachelor of Science offers greater specialization in a given field of knowledge than a General Degree, and requires higher than average academic achievement. Possession of this degree would be of great advantage to all students planning more advanced work in their chosen field. In many cases, an Honours Degree is a prerequisite for admission to a graduate program.

The Program of Study for an Honours Degree consists of two components: the Course Requirements and one of a Comprehensive Examination and Dissertation. In addition, specific Departmental Regulations may apply.

### 4.5.1 Course Requirements

1. The Program of Study for the Honours Degree of Bachelor of Science is determined by the student's declared Major(s).
a. When a student has declared a single Major, that student's Program of Study shall consist of the requirements for the corresponding Honours program, as set forth in the Program Regulations.
b. When a student has declared more than one Major in a combination for which a Joint Honours program exists, as set forth in Joint Program Regulations, that student's Program of Study shall consist of the requirements for the Joint Honours program.
c. When a student has declared more than one Major in a combination for which no corresponding Joint Honours program exists, that student may obtain permission to complete an Individualized Honours program, on the recommendation of the Head of each Major department. The Individualized Honours program must be approved by the Committee on Undergraduate Studies of the Faculty of Science.
2. The Program of Study for the Honours Degree shall normally require the student to complete courses from the Major subject(s) as follows, except in cases where it has been deemed that an appropriate rationale exists to warrant the requirement of an extraordinary number of credit hours:
a. in the case of an Honours program, not fewer than 60 credit hours in the Major subject;
b. in the case of a Joint Honours or an Individualized Honours program, not fewer than 84 credit hours in the Major subjects, including not fewer than 36 credit hours in each of the Major subjects.
3. A Program of Study may require the student to complete additional courses from subject areas other than the Major subject(s).
4. When a student is compelled to complete more than 120 credit hours in order to satisfy the prerequisites of courses required for a Program of Study, all of the courses which a student was required to complete in order to satisfy the requirements of the Honours Degree shall be used in the determination of the student's Academic Standing.

### 4.5.2 Comprehensive Examination and Dissertation

1. A candidate for the Honours Degree of Bachelor of Science shall complete one of the following options, at the discretion of the Head of each Major department:
a. the student shall pass a general comprehensive examination in the Major subject(s), or
b. the student shall submit a dissertation of a standard acceptable to the Head of each Major department, who shall also have the option of requiring the student to pass an oral examination thereon. The Honours dissertation shall be equivalent to either a 3 credit hour course or a 6 credit hour linked course, as specified in the course offerings of the Major department(s).
2. If a student is required to submit a dissertation, this dissertation must be submitted to the University Library before the Honours Degree is conferred. The deadline for the submission of an Honours dissertation shall be no later than three weeks before the end of the final semester of the student's program.
3. All Honours dissertations in the University Library shall be available for unrestricted consultation by students and faculty except under very exceptional circumstances which must be approved by the Head of each Major department. Copyright remains with the author. A release form, signed by both the author and the Head of each Major department, must accompany a dissertation when it is submitted to the University Library.

### 4.5.3 Departmental Regulations

A candidate for the Honours Degree of Bachelor of Science shall also comply with such additional requirements of each Major department as are approved by the Senate and printed in the Calendar

### 4.5.4 Residence Requirements

To qualify for an Honours Degree of Bachelor of Science, a student shall attend a recognized university or an equivalent institution for at least seven semesters as a full-time student. Students transferring credits to Memorial University of Newfoundland from other universities or equivalent institutions shall either:

1. spend a minimum of four of the seven semesters as full-time students at Memorial University of Newfoundland and take a minimum of 24 credit hours in courses from their Major subject(s) from this University, or
2. spend fewer than four of the seven semesters as full-time students at Memorial University of Newfoundland and take a minimum of 36 credit hours in courses from their Major subject(s) from this University.

### 4.6 Electives

In addition to the Core Requirements and the Program of Study, a candidate for the General Degree of Bachelor of Science or the Honours Degree of Bachelor of Science shall complete additional courses to satisfy the requirement of 120 credit hours, subject to the following:

1. Including the courses which comprise the Core Requirements and the Program of Study, the student shall complete courses from subject areas listed under Programs in the Faculty of Science with a total number of credit hours as follows:
a. at least 78 credit hours in the case of a candidate for the General Degree of Bachelor of Science, or
b. at least 90 credit hours in the case of a candidate for the Honours Degree of Bachelor of Science.
2. There shall be not fewer than five subjects in which the student shall have completed courses. At least four of these subjects shall be chosen from the subject areas listed under Programs in the Faculty of Science.
3. Not more than 15 unspecified transfer credit hours awarded in subject areas not taught at Memorial University of Newfoundland shall be used to satisfy the requirements of the degree.
4. The student may choose to take additional courses in a Major subject beyond those specified in the Program of Study.
5. The student may choose to complete a Minor program available in the Faculty of Science, the Faculty of Business Administration, the Faculty of Engineering and Applied Science, the Faculty of Humanities and Social Sciences, or the School of Music, in accordance with the regulations for the Minor program as set forth in the appropriate section of the Calendar.

### 4.7 Minor Programs in the Faculty of Science

1. A Minor program shall be as set forth in the Program Regulations.
2. A Minor program shall consist of at least 24 credit hours in courses. These courses shall normally be from the Minor subject, except in cases where it has been deemed that an appropriate rationale exists to warrant the requirement of courses from subject areas other than the Minor subject.
3. Students who have taken courses appropriate to their Minor at another university are required to complete at least 6 credit hours in courses from the Minor subject at this University. These courses must be chosen in consultation with the Head of the Minor department.

### 4.8 Graduation Requirements

### 4.8.1 Academic Standing

1. To obtain a General Degree of Bachelor of Science, in addition to meeting all of the requirements set forth under Programs in the Faculty of Science, a student shall have:
a. satisfied the conditions of UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation Application for Graduation - Degrees, Diplomas and Certificates;
b. obtained an average of at least 2.0 points in the minimum number of prescribed courses in the Major subject(s) and any additional courses identified for this purpose in the Program Regulations; and
c. obtained an average of at least 2.0 points in the 78 credit hours in courses from subject areas listed under Programs in the Faculty of Science required for the degree, as set forth under Electives.
2. To obtain an Honours Degree of Bachelor of Science, in addition to meeting all of the requirements set forth under Programs in the Faculty of Science, a student shall have:
a. satisfied the conditions of UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation Application for Graduation - Degrees, Diplomas and Certificates;
b. obtained a grade of "B" or better in each of the prescribed courses in the Major subject(s) excluding any 1000-level courses, and any additional courses identified for this purpose in the Program Regulations or an overall average of $75 \%$ or higher in those courses (whichever is to the candidate's advantage); and
c. an average of at least 2.75 points in the total number of courses required for the degree. If a student was required to complete more than 120 credit hours in order to satisfy the prerequisites of courses required for the Program of Study, as provided for under Programs of Study for the Honours Degree of Bachelor of Science, then all such courses shall be included in this calculation.
d. A student may, with the approval of the Head of each Major department and the Committee on Undergraduate Studies of the Faculty of Science, repeat or substitute up to three courses in order to meet the requirements of $2 . b$. above. In counting repeats, each attempt at the same course will count as one course towards the maximum; that is, the same course, repeated three times, would place a student at the maximum and no additional repeats or substitutions would be allowed.
e. A candidate for an Honours Degree of Bachelor of Science who fails to meet the requirements of 2.b. or 2.c. above but who fulfils the academic requirements for a General Degree of Bachelor of Science shall be awarded a General Degree.
3. To be awarded a Minor, in addition to meeting all of the requirements set forth under Minor Programs in the Faculty of Science, a student shall have obtained an average of at least 2.0 points on the total number of courses required for the Minor program.

### 4.8.2 Classification of Degrees

1. The classification of the General Degree of Bachelor of Science shall be determined in accordance with the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Graduation.
2. The classification of the Honours Degree of Bachelor of Science shall be determined as follows:
a. Students shall be awarded an Honours degree with First Class standing if they fulfil the conditions outlined under Academic Standing; obtain an average of at least 3.25 points in the courses prescribed for their Program of Study; and obtain an average of at least 3.5 points in the minimum number of prescribed courses in their Major subject(s), excluding any 1000-level courses, and any additional courses identified for this purpose in the Program Regulations.
b. Students shall be awarded an Honours Degree with Second Class standing if they fulfil the conditions outlined under Academic Standing but not of 2.a. above.
c. No classification will be given to the degree awarded to students who have completed fewer than one-half of the courses required for the Honours Degree at this University.

## 5 Bachelor of Science in Nutrition (Dietetics Option)

www.mun.ca/science/students/dietetics_info.php

### 5.1 General Information

Under the terms of a Memorandum of Understanding (MOU) between Memorial University of Newfoundland and Acadia University, selected students are able to complete the first two years of Acadia University's Bachelor of Science in Nutrition (Dietetics option) at Memorial University of Newfoundland and complete the final two years of the program at Acadia University. Selection for this program is competitive and is limited to ten qualified students each year. Upon successful completion of all degree requirements students will graduate with the degree of Bachelor of Science in Nutrition (Dietetics option) from Acadia University.
For detailed information about the Memorial University of Newfoundland component of the program, and for information about the selection process and deadlines, contact the Office of the Dean of Science by e-mail at science@mun.ca or by telephone at (709) 8648153 or (709) 864-8154.
For detailed information about the Acadia University program, contact Acadia University in writing to the School of Nutrition and Dietetics, Acadia University, P.O. Box 68, 12 University Avenue, Wolfville, Nova Scotia, Canada B4P 2R6, or by telephone at (902) 5851366, or by e-mail at nutr@acadiau.ca, or through the website at nutrition.acadiau.ca/.

### 5.2 Admission Regulations

1. Students who are interested in pursuing this program must first complete 30 credit hours from the prescribed courses from the Memorial University of Newfoundland Courses list below.
2. In the Winter semester, normally at the end of a student's first year at Memorial University of Newfoundland, a selection competition will be held. Only those students who are selected will be eligible to continue into the second year of the program at Memorial University of Newfoundland.
3. The selection process will be jointly administered by Memorial University of Newfoundland and by Acadia University.
4. Academic achievement will be a significant criterion used for selection and students may be asked to attend an interview.
5. The letter of acceptance will give the selected applicant 14 days from the date of the letter in which to confirm acceptance of their place in the program.
6. To continue on to Acadia University, the selected students must successfully complete the 17 courses, 51 credit hours from the Memorial University of Newfoundland Courses and the 3 courses, 9 credit hours from the Acadia University Courses lists below required by the MOU with a minimum 60\% overall average. A grade of $60 \%$ (Acadia University equivalent grade of C-) is required in each of the three individual Nutrition courses taken through Open Acadia at www.openacadia.ca, the distance education unit of Acadia University.

### 5.3 Continuance Regulations

Students who successfully complete the first two years of the program at Memorial University of Newfoundland as described below will transfer to Acadia University where the final two years will be completed.

### 5.3.1 Memorial University of Newfoundland Courses

Under the terms of the MOU, the following 17 courses, 51 credit hours at Memorial University of Newfoundland must be completed with a minimum 60\% overall average before being admitted to the third year of Acadia University's program:

1. Biology 1001
2. Chemistry 1050 and 1051 (or Chemistry 1200, 1001)
3. Chemistry 2400
4. English 1090 or the former English 1080, 1110 (or equivalent)
5. Mathematics 1090 and 1000 (or Mathematics 1000 and one elective)
6. Pharmacy 2002, 2003, and one of Pharmacy 2004, Biochemistry 2201 or the former 2101 , (only students who are selected for this program will be permitted to register for these Pharmacy courses)
7. Psychology 1000, 1001
8. Statistics 2500, 2501
9. Two Humanities and Social Sciences electives

### 5.3.2 Acadia University Courses

To continue to the third year of Acadia University's program, the selected students must successfully complete 20 courses, 60 credit hours comprised of the 17 courses, 51 credit hours from the Memorial University of Newfoundland Courses list above and the 3 courses, 9 credit hours from the Acadia University Courses list below. This is required by the MOU and students must obtain a minimum 60\% overall average. A grade of $60 \%$ (Acadia University equivalent grade of C -) is required in each of the three individual Nutrition courses taken through Open Acadia at www.openacadia.ca, the distance education unit of Acadia University.
Nutrition 1313
Nutrition 1323
Nutrition 2323

### 5.3.3 Internship

In order to be eligible to apply for internship placements administered by the Acadia Dietetic Internship Program, students must obtain a grade of at least B- (70-72) in the two courses Nutrition 2503 and 2513 . This requirement does not apply for other non-Acadia internships for which all students are eligible to apply.

### 5.3.4 Programs Tables

The following tables present a schedule for completing the course requirements at Memorial University of Newfoundland.
For Students Who Complete Mathematics 1090 in Their First Semester

| Term | Suggested Courses |
| :---: | :---: |
| Fall <br> Semester 1 | Biology 1001 <br> Chemistry 1010 or 1200 <br> English 1090 or the former English 1080 <br> Mathematics 1090 <br> Psychology 1000 |
| Winter Semester 2 | the former Chemistry 1011 or 1001 <br> English 1110 (or equivalent) <br> Mathematics 1000 <br> NUTR 2323 through Acadia Online at www.openacadia.ca Psychology 1001 |
| Fall <br> Semester 3 | Humanities and Social Sciences Elective <br> Chemistry 2440 <br> NUTR 1313 through Acadia Online at www.openacadia.ca <br> Pharmacy 2002 <br> Statistics 2500 |
| Winter Semester 4 | Humanities and Social Sciences Elective NUTR 1323 through Acadia Online at www.openacadia.ca Pharmacy 2004 (Biochemistry 2201 or the former 2101) Pharmacy 2003 Statistics 2501 |

For Students Who Complete Mathematics 1000 in Their First Semester


Notes: 1. Statistics 2501 is offered on campus in the Fall semester and normally is offered only by distance education in the Winter semester.
2. While students are strongly encouraged to complete Nutrition 2323 in the first year, they can substitute an Humanities and Social Sciences elective for Nutrition 2323 in the firstyear but must then complete Nutrition 2323 in the second year.
3. All three Open Acadia courses must be completed prior to starting courses at Acadia.

## 6 Joint Degrees of Bachelor of Science and Bachelor of Arts

Students who wish to simultaneously pursue a Bachelor of Science program and a Bachelor of Arts program may do so by completing a minimum of 135 credit hours in courses, rather than the minimum of 150 credit hours required under UNIVERSITY REGULATIONS General Academic Regulations (Undergraduate), Residence Requirements - Second Degree.
Students who complete the Joint Degrees of Bachelor of Science and Bachelor of Arts are not required to complete a minor. Students may complete the requirements for a minor, or an additional (third) major, in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Degree and Departmental Regulations - Further Credentials.
Credit hours earned in Computer Science, Economics, Geography, Mathematics and Statistics, and Psychology may be eligible to simultaneously satisfy a requirement for credit hours in the Faculty of Science and a requirement for credit hours in the Faculty of Humanities and Social Sciences.
Careful planning of courses is crucial to ensure timely completion of the Joint Degrees of Bachelor of Science and Bachelor of Arts. Students enrolled in this program, or who plan to enroll in this program, are strongly encouraged to consult regularly with appropriate academic advisors in both the Faculty of Science and the Faculty of Humanities and Social Sciences. It may not be possible to complete the requirements for the Joint Degrees in the normal time if the decision to embark on the program is delayed.
Students who have enrolled in the Joint Degrees of Bachelor of Science and Bachelor of Arts must satisfy all program requirements before they may be granted either the degree of Bachelor of Science and Bachelor of Arts, and must graduate with both degrees at the same convocation.

1. The minimum of 135 credit hours for the Joint Degrees of Bachelor of Science and Bachelor of Arts shall include:
a. a Major program chosen from those majors offered by departments within the Faculty of Science with the exception of majors offered by the Department of Economics and the Department of Geography;
b. a Major program chosen from those majors offered by departments within the Faculty of Humanities and Social Sciences with the exception of majors offered by the Department of Computer Science, the Department of Mathematics and Statistics, and the Department of Psychology;
c. the Core Requirements for the Faculty of Humanities and Social Sciences (including the Breadth of Knowledge Requirement, the Critical Reading and Writing (CRW) Requirement, the Language Study (LS) Requirement, and the Quantitative Reasoning (QR) Requirement), for which the Quantitative Reasoning Requirement shall be satisfied by 6 credit hours in Mathematics and Statistics courses;
d. 6 credit hours in courses from each of two Sciences other than Mathematics and Statistics courses;
e. a total of at least 78 credit hours in courses offered by departments within the Faculty of Science, and a total of at least 78 credit hours offered by departments within the Faculty of Humanities and Social Sciences; and
f. no more than 6 credit hours in courses offered by a Faculty or School other than the Faculty of Science or the Faculty of Humanities and Social Sciences.
While the Joint Degrees of Bachelor of Science and Bachelor of Arts is available to all Major programs offered by the Faculty of Science and the Faculty of Humanities and Social Sciences, students pursuing a major outside of Computer Science, Economics, Geography, Psychology, Pure Mathematics or Statistics should pay special attention to course planning and selection to ensure that this requirement is met within the required 135 credit hours.
2. Admission to the Major programs shall be governed by the Faculty of Science Degree Regulations - Admission and Faculty of Humanities and Social Sciences - Admission to the Bachelor of Arts General Degree Programs.
3. Students who have already completed a bachelor's degree are not eligible to complete the Joint Degrees of Bachelor of Science and Bachelor of Arts, but may separately complete a Bachelor of Science or a Bachelor of Arts in accordance with UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Residence Requirements - Second Degree,

## 7 Limited Enrolment Courses

Certain course offerings in the Faculty of Science will be identified as being Limited Enrolment Courses and will be clearly identified as such in the list of course offerings. Students who have registered for a Limited Enrolment Course must confirm their registration either (1) by attending at least one of the first three hours of lecture in the course and the first meeting of any laboratory section of the course; or (2) by notifying the department in writing within the first five university working days of the semester. Students who do not confirm their registration may be dropped from the course on the recommendation of the Head of Department.

## 8 Supplementary Examinations

1. Supplementary examinations will be allowed in certain courses offered by the Department of Biochemistry, the Department of Computer Science, and the Department of Mathematics and Statistics which have written final examinations. In each course, students will be informed as to the possibility of a supplementary examination during the first week of classes. This information will be provided in writing, as part of the Course Syllabus.
2. Supplementary examinations will be of similar length and degree of difficulty as the original final examination.
3. Students who wish to write a supplementary examination must apply in writing to the appropriate department within one week of the official release of grades by the University.
4. Students who have clear or conditional standing may write a supplementary examination in a course if they obtained a final grade of $45-49 \mathrm{~F}$ and if their grade in the course excluding the original final examination is at least $50 \%$.
5. In order to pass the course, a student who has been approved to write a supplementary examination must pass the supplementary examination. If the student passes the supplementary examination, then a new final grade will be calculated using the same evaluation scheme as used in the course, but with the result of the supplementary examination replacing that of the original final examination. Any additional course requirements, including a requirement to pass the laboratory component of a course, will continue to apply.
6. If the new final grade is higher than the original, it will replace the original grade on the student's transcript, subject to the condition that the new final grade will not exceed the grade which the student had obtained in the course excluding the original final examination. The student's transcript will indicate that the course result was earned as the result of a supplementary examination.
7. Supplementary examinations will be written no later than the first week of the semester immediately following the one in which the course was failed, and will normally coincide with the writing of deferred examinations. Grades for supplementary examinations will be submitted to the Office of the Registrar within one week following the commencement of classes for that semester.
8. A student may write only one supplementary examination for any one registration in a course; if a failing grade is obtained in the course following the supplementary examination then the course must be repeated in order to obtain credit.

## 9 Waiver of Regulations for Undergraduate Students

Where circumstances so warrant, students may seek a waiver of course prerequisites and co-requisites, program and other departmental regulations, faculty regulations, and general academic regulations. Requests for such waivers should be directed according to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.
The procedures for appealing unfavourable decisions are outlined in UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Appeal of Decisions.

## 10 Joint Program Regulations

The following Joint Major, Joint Honours and Joint Option programs which lead to the awarding of a General Degree of Bachelor of Science or an Honours Degree of Bachelor of Science are offered by departments in the Faculty of Science. They are governed by Programs of Study for the General Degree of Bachelor of Science and Programs of Study for the Honours Degree of Bachelor of Science as appropriate.
A joint degree program, which leads to the awarding of both the General Degree of Bachelor of Science and the General Degree of Bachelor of Arts, can be found under the Faculty of Science at Joint Degrees of Bachelor of Science and Bachelor of Arts and under the Faculty of Humanities and Social Sciences at Joint Degrees of Bachelor of Arts and Bachelor of Science.
Course descriptions are found at the end of the Faculty of Science section under Course Descriptions.

### 10.1 Joint Majors

### 10.1.1 Applied Mathematics and Computer Science Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, plus 18 further credit hours in Computer Science courses numbered 3000 or higher.
2. Mathematics $1000,1001,2000,2050,2051,2130,2260,2320,3000,3100,3132,3161,3202,4160$, and 4190

In addition, Statistics 2550 is highly recommended.

### 10.1.2 Applied Mathematics and Economics Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Mathematics $1000,1001,2000,2050,2051,2130,2260,2320,3000,3100,3202$, Statistics 2550.
2. Either Mathematics 3132 and 4131 or 3161 and 4160.
3. A computing course early in the program is required. Computer Science 1510 is highly recommended.
4. Economics: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, 3010, 4550, 4551.
5. Eighteen further credit hours chosen from among the various Economics courses in consultation with the Head of the Department or delegate, including at least 9 credit hours at the 4000 level.

### 10.1.3 Applied Mathematics and Physics Joint Major

Required course for this degree are:

1. Six credit hours in Critical Reading and Writing (CRW) courses including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 is recommended.
3. Six credit hours in science other than Mathematics or Physics (if Computer Science is chosen then Computer Science 1510 may be counted as 3 of these hours).
4. Mathematics $1000,1001,2000,2050,2051,2260,2320,3000,3001,3132,3202$.
5. Physics 1050 (or 1020), 1051, 2053, 2055, 2750 (or 2056), 2820, 3220, 3400, 3500, 3750.
6. Mathematics 3161 or Physics 3820 .
7. At least 15 additional credit hours chosen from Applied Mathematics and Physics courses numbered 3000 or above. At least 3 hours are required from Applied Mathematics and 6 hours are required from Physics.
8. A writing course. Any one of Mathematics 2130, Physics 3900, Mathematics 419A/B, or Physics 490A/B is acceptable.

The last requirement does not have to be met independently of the other regulations. For example, it can be satisfied either by choosing Mathematics 2130 from clause 5. above or choosing Physics 3900 as a $3000+$ elective in clause 8 . above.

### 10.1.4 Computer Science and Economics Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science Requirements

Forty-two credit hours in Computer Science courses are required: 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, 3731, 3753 plus 6 further credit hours in Computer Science courses numbered 3000 or higher.
2. Economics requirements A total of 42 credit hours in Economics courses are required: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001,3010 , and 6 credit hours from either 3550 and 3551 , or 4550 and 4551 are obligatory.
The remaining 18 credit hours shall be chosen from among the various Economics courses in consultation with the Head of the Department or delegate, and will include at least 9 credit hours in courses at the 4000 level.
Additional Requirements: Mathematics 1000, 1001, 2000, 2050, and Statistics 2550.

### 10.1.5 Computer Science and Geography Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science Requirements

Thirty-nine credit hours in Computer Science courses are required: 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, the former 4751 plus 6 further credit hours in Computer Science courses numbered 3000 or higher.
2. Geography Requirements

Thirty-nine credit hours in Geography courses are required: 1050, 2001, 2102, 2195, 2302, 2425, 3202, 3222, 3250, 3260, 4202, 4250, 4261.
3. Additional Requirements: Mathematics 1000, 1001, 2000, 2050, and Statistics 2550.

### 10.1.6 Computer Science and Physics Joint Major (B.Sc. only)

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Chemistry 1050 and 1051 (or Chemistry 1010, the former 1011, and the former 1031).
2. Thirty-nine credit hours in Computer Science are required for the Joint Major: 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 3731 plus 9 further credit hours in Computer Science courses numbered 3000 or higher, including at least 3 credit hours at the 4000 level.
3. Physics 1050 (or 1020) and 1051 plus at least 30 additional credit hours in Physics including 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3750, 3800.
4. a. Mathematics 1000 and 1001.
b. Mathematics 2000, 2050, 2260, 3202.
c. Additional electives to bring the credit hours to 120 . Computer Science 2500 and Statistics 2550 are recommended.

### 10.1.7 Computer Science and Pure Mathematics Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science 1001, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008.
2. Eighteen additional credit hours in Computer Science courses numbered 3000 or higher.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3202, 3320, 3340, and Statistics 2550.
4. Nine additional credit hours in courses numbered 3000 or higher offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330.

### 10.1.8 Computer Science and Statistics Joint Major (B.Sc. Only)

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science 1001, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, 3731, 4734, plus 12 further credit hours in Computer Science courses numbered 3000 or higher.
2. Statistics 1510 or 2500 or 2550 , and 2501 or 2560.
3. Mathematics $1000,1001,2000,2050,2051,2320,3340$, Statistics 2410 or $3410,3411,3520,3521,3540,4590$.
4. Nine further credit hours in Statistics courses numbered 3000 or higher including at least a 3 credit hour course numbered 4000 or higher excluding Statistics 4581.

### 10.1.9 Earth Sciences and Physics Joint Major

This program was formerly in the Earth Sciences section of the Calendar as a Bachelor of Science in Geophysics. The following courses will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1000 and 1001, Earth Sciences 1000 and 1002, Chemistry 1050 and 1051 (or 1200 and 1001), Physics 1050 (or 1020) and 1051.
3. Earth Sciences 2030, 2401, 2502, 2702, 2905, 3170, 3172, 3420, 3905; plus a 3 credit hour course in Earth Sciences 4100 series.
4. At least 30 credit hours in Physics courses at the 2000 level or higher, including Physics 2055, 2056 or 2750, 2820, $3220,3500$.
5. Mathematics 2000, 2050 and 3202.
6. Other courses to complete at least a minimum requirement of 120 credit hours in courses for the General Degree.

Any change in the program of study must have the prior approval of the Heads of the two Departments concerned.

### 10.1.10 Economics and Pure Mathematics Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Mathematics $1000,1001,2000,2050,2130,2260,2320,3000,3100,3202,3320$, Statistics 2550 and one 4000 level Mathematics course.
2. A computing course early in the program is required. Computer Science 1510 is highly recommended.
3. Economics: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, 3010, and 6 credit hours from either 3550 and 3551 , or 4550 and 4551.
4. Eighteen further credit hours chosen from among the various Economics courses in consultation with the Head of the Department or delegate, including at least 9 credit hours at the 4000 level.

### 10.1.11 Economics and Statistics Joint Major

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Mathematics $1000,1001,2000,2050,2051$, Statistics 2410 or $3410,2550,2560,3411,3520,3540,4590$.
2. Six further credit hours in Statistics courses numbered 3000 or higher, at least 3 credit hours of which must be numbered 4000 or higher, excluding Statistics 3521 and 4581.
3. Economics: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, 3010, 4550, 4551.
4. Eighteen further credit hours chosen from among the various Economics courses in consultation with the Head of the Department or delegate, including at least 9 credit hours at the 4000 level.

### 10.1.12 Economics (Co-operative) and Statistics Joint Major

The Joint Major in Economics (Co-operative) and Statistics is available exclusively to full-time Economics and Statistics majors (B.Sc. only). The program is available under the Economics Co-operative Education Option (ECEO).
The ECEO provides an excellent mutual opportunity for students and employers. Qualified students will obtain rewarding employment experience in fields related to Economics for several months of continuous duration. Students will learn valuable practical skills in an employment situation during their course of study. Furthermore, paid employment will help to defray the cost of their education. The
timing of the Work Terms and the structure of the ECEO generally are such that employers stand to gain from the acquired employable skills of economists and statisticians in training. The objectives of the Work Term component of the ECEO are embodied in the Work Term descriptions below. The descriptions serve to guide the student and the employer toward achieving these objectives.

### 10.1.12.1 Admission Requirements

1. Admission is competitive and selective. Therefore, prospective students are encouraged to consider an alternate degree program in the event that they are not accepted into the Joint Co-operative program.
2. Applicants should note that it is possible to enter Term 1 only in the Fall semester commencing in September of each academic year. Application forms are available in the Department of Economics and the Department of Mathematics and Statistics. The deadline for applications for admission to Term 1 is March 1.
3. The primary criterion used in reaching decisions on applications for admission is overall academic achievement. Students with weak overall academic records are unlikely to be admitted.
4. To be eligible for admission to Term 1 an applicant must have successfully completed a minimum of 30 credit hours with an overall average of at least $65 \%$ as follows: All applicants must have completed Economics 1010 (or the former 2010) and 1020 (or the former 2020); at least 6 credit hours in English; Mathematics 1000 and 1001; and 12 credit hours chosen from courses in the Faculties of Humanities and Social Sciences or Science.
It is recommended that students complete English 1110 Critical Reading and Writing II (Context, Substance, Style) as one of these English courses.
5. Students may apply for admission to Advanced Standing.
6. Transfer students from other universities will be placed in that term of the program judged to be appropriate considering equivalent credits, as determined by the Departments.

### 10.1.12.2 Program of Study

a. Promotion from each of Terms 1 through 6 requires a passing grade in all specified required courses and an overall average of at least $60 \%$ in all courses including electives. A student who fails a required course or fails to maintain an overall average of $60 \%$ will not be promoted to the next term and will be required to withdraw from the program. The student in question may apply for readmission in a subsequent year after passing the specified required course(s) previously failed, or re-establishing the 60\% average.
b. In addition to the 30 credit hours required for admission, students are required to complete the six academic terms in the ECEO program for a total of 120 credit hours. Students must complete three Work Terms which follow Academic Terms 2, 4, and 5 .
c. Courses shall normally be taken in academic terms or "blocks" in the sequenced course load and order set out in the Academic Course Program - Economics (Co-operative) and Statistics Joint Major Table. Unspecified credits may be used to fulfill elective requirements only.
d. UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Classification of Students notwithstanding, students do not require special permission to register for courses while on work terms if the courses are in addition to the prescribed program.

### 10.1.12.3 Work Term Placement

See Regulations in Economics for the Major in Economics (Co-operative), in the Faculty of Humanities and Social Sciences section of the Calendar.

### 10.1.12.4 Registration and Evaluation of Performance

See Regulations in Economics for the Major in Economics (Co-operative), in the Faculty of Humanities and Social Sciences section of the Calendar.

Academic Course Program - Economics (Co-operative) and Statistics Joint Major Table

| Term 1 (Fall) <br> Economics 3000 <br> Economics 3550 <br> Statistics 2550 <br> Mathematics 2000 <br> the former Computer <br> Science 1700 | Term 3 (Fall) <br> Economics 4550 <br> Mathematics 2051 <br> Statistics 2410 or 3410 <br> 3 further credit hours in Statistics courses <br> 3 credit hours in elective courses [see Note 2] | Term 5 (Fall) <br> Statistics 3520 <br> Statistics 4590 <br> 6 further credit hours in Economics courses <br> 3 further credit hours in Statistics courses |
| :---: | :---: | :---: |
| Term 2 (Winter) <br> Economics 2550 <br> Economics 3001 <br> Economics 3010 <br> Mathematics 2050 <br> Statistics 2560 | Term 4 (Winter) <br> Economics 3011 <br> Economics 4120 <br> Economics 4551 <br> Statistics 3411 <br> Statistics 3540 | Work Term III (Winter) Economics 499W |
| Work Term I (Spring) Economics 299W | Work Term II (Spring) Economics 399W | Term 6 (Spring) <br> 3 further credit hours in Economics courses 3 credit hours in Science courses [see Note 2] 9 credit hours in elective courses [see Note 2] |

Notes: 1. Another 1000-level Computer Science course may be substituted for the former Computer Science 1700 with the Heads' approvals.
2. Elective courses should be chosen with reference to the Degree Regulations for the General Degree of Bachelor of Science, since courses specified for admission to and completion of the program only partially satisfy these regulations. In particular note that in addition to the 78 credit hours (26 courses) in Science subjects required, at least 3 credit hours in a Science subject other than Mathematics and Statistics, Economics and Computer Science must be completed.

### 10.1.13 Marine Biology Joint Major

The Joint Major in Marine Biology is jointly administered by the Department of Ocean Sciences and the Department of Biology. More information on recommended courses and time tables can be found in the Handbook of Undergraduate Studies available on both departmental websites.
Students who wish to enroll in the program should seek academic advising well in advance to ensure they have completed the appropriate prerequisites. Entry to required courses may be limited and determined by academic performance. Students are advised to consult with the Department of Ocean Sciences or the Department of Biology at the earliest opportunity. Each student registered in the program will be assigned an advisor who should be consulted on academic issues, including course selection.

### 10.1.13.1 Admission Requirements

Admission to the program is based on academic standing. To be considered for admission to the program, students will normally have completed the following courses (or their equivalents) with an overall average of at least $60 \%$ :

1. Biology 1001 and 1002 with an average grade of $65 \%$;
2. Chemistry 1050 and 1051 (or 1200 and 1001);
3. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
4. Mathematics 1000 ;
5. Ocean Sciences 1000 with a minimum grade of $65 \%$;
6. Physics 1020 (or 1050); and
7. Physics 1021 (or 1051) or one Ocean Sciences course at the 2000 level.

Students should be aware that delaying some of the above courses, particularly Chemistry 1050 and 1051 , until second year may make it difficult to complete the program in the normal four years.

### 10.1.13.2 Program of Study

Students pursuing a Joint Major in Marine Biology are required to complete a minimum of 60 combined credit hours from Biology and Ocean Sciences, with a minimum of 27 credit hours in each subject:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Mathematics 1000 ;
3. Earth Sciences 1000;
4. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550,
5. Physics 1020 and 1021 (or 1050 and 1051);
6. Chemistry 1050 and 1051 (or 1200 and 1001), and 2400 and 2401 ;
7. Biochemistry 2201 or the former 2101;
8. Biology 1001, 1002, 2060, 2122, 2250 (or Biochemistry 2100), 2600, 2900, 3710 (or Ocean Sciences 2000) and 3711 ;
9. Ocean Sciences 1000, 2000 (or Biology 3710), 2001, 2100, and 2500;
10. additional courses to complete the required 60 combined credit hours in Biology and Ocean Sciences with a minimum of 27 credit hours in each subject (except Biology 2040, 2041, 2120, 3053, and 3820). A minimum of 6 credit hours in Biology at the 3000/4000 level and 12 credit hours in Ocean Sciences at the 3000/4000 level is required; and
11. other courses as necessary to complete the minimum of 120 credit hours required for the General Degree of Bachelor of Science.

Notes: 1. Courses cross listed between Biology and Ocean Sciences can only count for one subject or the other.
2. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.
3. Students are encoûraged to take Biochemistry 3206 as it is a pre-requisite for several higher-level courses in Biology and in Ocean Sciences.

### 10.2 Joint Honours

### 10.2.1 Applied Mathematics and Chemistry Joint Honours

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 is recommended.
3. Biochemistry 2201 or the former 2101, or 2901.
4. Physics 1050 (or 1020) and 1051 (or 1021).
5. Mathematics $1000,1001,2000,2050,2051,2260,2320,3000,3001,3132,3161,3202,3210,4160$.
6. Chemistry 1050 and 1051 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3110, 3210 or 3211, 3303.
7. Six additional credit hours chosen from courses numbered 3000 or higher that are offered by the Department of Chemistry.
8. An Honours Dissertation (Mathematics 419A/B or Chemistry 490A/B). The topic of the Honours Dissertation must have the prior approval of the Heads of the two Departments. A faculty member of either Department may act as supervisor.
9. A sufficient number of elective courses to bring the degree up to a total of 120 credit hours.
10. Mathematics 2130 is recommended.

### 10.2.2 Applied Mathematics and Physics Joint Honours

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 or 1001 is recommended.
3. Six credit hours in a science other than Mathematics or Physics (if Computer Science is chosen then Computer Science 1510 may be counted as three of these hours).
4. Mathematics 1000, 1001, 2000, 2050, 2051, 2260, 2320, 3000, 3001, 3132, 3202, 3210.
5. Physics 1050 (or 1020), 1051, 2053, 2055, 2750 (or 2056), 2820, 3220, 3230, 3400, 3500, 3750, and one of 3800 or 3900 .
6. One of Mathematics 3161 or Physics 3820 and one of Mathematics 4160 or Physics 4820.
7. Physics 490A/B or Mathematics 419A/B.
8. Twelve additional credit hours chosen from courses numbered 4000 or higher that are offered by the Department of Mathematics and Statistics or the Department of Physics and Physical Oceanography. At least 3 credit hours must be selected in each of Applied Mathematics and Physics.
9. Twelve credit hours in applicable elective courses. Mathematics 2130 is recommended.

The topic for the Honours project or thesis, Mathematics 419A/B or Physics 490A/B, must be chosen with the prior approval of both departments.

### 10.2.3 Biochemistry and Cell Biology Joint Honours

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Biology 1001, 1002, Chemistry 1050, 1051 (or 1200 and 1001), Mathematics 1000, 1001, Physics 1020 or 1050 , Physics 1021 or 1051, Statistics 2550;
3. Biochemistry 2201 or the former 2101, 2901, 3105, 3206, Chemistry 2301, 2400, 2401;
4. Either Biochemistry 3207 and 3108 or Medicine 310A/B;
5. An additional 9 credit hours to be selected from Biochemistry 3906 or $3907,4002,4101,4102,4103,4104,4105,4200,4201,4210$ or 4211, 4230, 4231-4239;
6. Biology 2060, 2250, 2600, 2900, 3530, 4241, plus one of Biology 3401, 3402, 4245 or 4404;
7. 12 credit hours from the following: Biology 3050, 3052 (or Biochemistry 3052), 3401, 3402, 3500, the former 3620, 3950,3951 , 4010, 4040, 4050, 4200 (or Biochemistry 4105), 4245, 4250, 4251, 4255, 4404, 4550, 4605, 4607;
8. Biochemistry 499A/B or Biology 499A/B; and
9. Electives to make up 120 credit hours.

Seventy-five credit hours in Biology, Biochemistry and Chemistry courses beyond the first-year level from those listed in the program shall contribute to those in which a grade of "B" or an average of 75 or higher is required. Medicine 310A/B counts as Biochemistry for these 75 credit hours.

### 10.2.4 Biochemistry and Chemistry Joint Honours

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001), Mathematics 1000 and 1001, Physics 1050 (or 1020) and 1051 (or 1021), Biology 1001 and 1002 are highly recommended;
3. Mathematics 2000;
4. Chemistry $2100,2210,2301,2302,2400,2401,3110,3211,4410$;
5. Nine further credit hours in Chemistry courses numbered 3000 or higher, at least 6 credit hours of which must be in courses numbered 4000 or higher;
6. Biochemistry 2200 or 2100, Biochemistry 2201 or the former 2101, 2901, 3105, 3206;
7. Either Biochemistry 3108 and 3207 , or Medicine 310 A/B
8. 9 credit hours chosen from Biochemistry 3906 or $3907,4002,4101,4102,4103,4104,4105,4200,4201,4210$ or 4211,4230 , 4231-4239;
9. Either Chemistry 490A/B or Biochemistry 499A/B; and
10. A sufficient number of elective courses to bring the degree to a total of 120 credit hours.

Note: Students should check prerequisites for 4000 level courses before making decisions about their 3000 level courses and seek academic advice if necessary.

### 10.2.5 Biochemistry and Physics Joint Honours

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Chemistry 1050 and 1051 (or 1200 and 1001), Mathematics 1000 and 1001, Physics 1050 (or 1020) and 1051;
3. Chemistry 2400, 2401;
4. Chemistry 2301 or Physics 2053;
5. Mathematics 2000, 2050, 2260, either Mathematics 3202 or Physics 3810;
6. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3206;
7. Either Biochemistry 3108 and 3207, or Medicine 310A/B;
8. An additional 9 credit hours to be selected from Biochemistry 3906 or $3907,4002,4101,4102,4103,4104,4105,4200,4201,4210$ or 4211, 4230-4249;
9. Physics 2055, 2750 or 2056, 2820, $3220,3400,3500,3750,3820,3900$, plus one 4000 level Physics course;
10. Either Physics 490A/B or Biochemistry 499A/B; and
11. Other courses to complete the prescribed minimum of 120 credit hours in courses for the Joint Honours degree.

### 10.2.6 Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours

Note: Students completing this program cannot receive credit for Psychology 2920.
The following courses (or equivalent) are required to complete the 120 credit hours in courses required for the degree:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Chemistry 1050 and 1051 (or 1200 and 1001), Biology 1001 and 1002, Mathematics 1000 and 1001, Physics 1050, (or 1020), 1051 (or 1021);
3. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3206;
4. Either Biochemistry 3108 and 3207 , or Medicine 310A/B;
5. 9 credit hours to be selected from Biochemistry 3906 or $3907,4002,4101,4102,4103,4104,4105,4200,4201,4210$ or 4211 , 4230, 4231-4239;
6. Psychology 1000, 1001, 2521, 2910, 2911, 2930; one of the former PSYC 3250, 3810, 3830, 3840, or 3860; 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
7. Either Biochemistry 499A/B or Psychology 499A/B; and
8. Chemistry 2301, 2400, 2401.

Notes: 1. As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of " $B$ " or better, or an average of $75 \%$ or higher in all the required courses listed in Clauses 3., 4., 5., 6. and 7. above, except those at the 1000 level.
2. Students in first year intending to follow this program should note the regulations for admission to Major programs in Psychology and that the deadline for submission of a completed application form to the Department of Psychology is June 1 for the Fall semester.

### 10.2.7 Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours

Note: Students completing this program cannot receive credit for Psychology 2920.
The following courses (or equivalent) are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or 1200 and 1001), Biology 1001 and 1002, Mathematics 1000, Physics 1020 or 1050 , and 1021 (or 1051).
3. Biochemistry 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3906, Medicine $310 \mathrm{~A} / \mathrm{B}, 4300,4301,4502$, one course chosen from: Biochemistry 3052, 3108, 3402, 3600, 4002, 4105, 4200, 4230, 4240, 4241-4249, Biology 3050.
4. Psychology 1000, 1001, 2521, 2910, 2911, 2930; one of the former PSYC 3250, 3810, 3830, 3840, or 3860; 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
5. Either Biochemistry 499A/B or Psychology 499A/B.
6. Chemistry 2400.
7. Other courses to complete at least the prescribed minimum of 120 credit hours in courses for the Joint Honours Degree.

Notes: 1. As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of " $B$ " or better, or an average of $75 \%$ or higher in all the required courses listed in Clauses 3., 4. and 5. above, except those at the 1000 level.
2. Students in first year intending to follow this program should note the regulations as outlined for admission to Major programs in Psychology and that the deadline for submission of a completed application form to the Department of Psychology is June 1 for the Fall semester.

### 10.2.8 Biology and Earth Sciences Joint Honours

The following courses, including prerequisites where applicable, will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1000 and 1001, Biology 1001 and 1002, Earth Sciences 1000 and 1002, Chemistry 1050 and 1051 (or 1200 and 1001), Physiés 1020 and 1021 (or 1050 and 1051).
3. Chemistry 2440, Biochemistry 2201 or the former 2101, Biochemistry 3206 or 3106, one of Statistics 2550 or 2560.
4. Biology 2060, 2250, 2600, 2900, one of 3401,3402 , 4245 or 4404 ; plus Biology 3710,3711 , and 4505 . In addition, further Biology courses at the 2000, 3000, or 4000 level must be selected by the student in consultation with the supervisor to make up a minimum of 42 credit hours in Biology not including Biology 499A or 499B.
5. Earth Sciences 2030, 2031, 2502, 2905; plus a minimum of 24 credit hours in other Earth Science courses from 2000 to 4000 level, at least 3 credit hours of which must be at 4000 level. Earth Sciences 2150, 2914, 2915, 2916, 2917, 2918, 4310, and 4950 cannot be used to fulfill this requirement. Career-related streams outlined in the departmental Student Handbook should be used as a guide to course selection so as to achieve a concentration in one facet of Earth Sciences.
6. An Honours dissertation (Biology 499A/B or Earth Sciences 499A/B). The topic of the Honours dissertation must be chosen with the approval of both Department Heads. A faculty member of either Department may act as supervisor.
7. Other courses to complete a minimum of 135 credit hours in courses for the Honours degree, with at least 84 credit hours in courses in Biology and Earth Sciences combined.
Any change in the program of study must have the prior approval of the Heads of the two Departments concerned.

### 10.2.9 Biology and Psychology Joint Honours

Note: Students completing this program cannot receive credit for Psychology 2920.
The following courses (or equivalent) are required:

1. Biology 1001, 1002, 2060, 2250, 2600, 2900; one of $3401,3402,4245,4404$; four Biology electives at the 2000,3000 or 4000 level not including Biology 499A or 499B.
2. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930, one of the former PSYC 3250, 3800, 3810, 3830, 3840, or 3860; 3900, 4910; one of the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650; one further 4000 level Psychology research experience course.
3. Biology or Psychology 3750, 4701, 499A/B.
4. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
5. Mathematics 1000; Chemistry 1050 (or 1200), 1051 (or 1001), 2400, and 2401; Physics 1020 (or 1050) and 1021 (or 1051); Biochemistry 2201 or the former 2101 and 3206 or 3106.
6. Other courses, if necessary, to complete at least 120 credit hours of courses.

### 10.2.10 Biology and Psychology (Behavioural Neuroscience) Joint Honours

Note: Students completing this program cannot receive credit for Psychology 2920.
The following courses (or equivalent) are required:

1. Biology 1001, 1002, 2060, 2250, 2600, 2900; one of $3401,3402,4245,4404$; five Biology electives at the 2000,3000 or 4000 level not including Biology 499A or 499B.
2. Psychology 1000, 1001, 2521, 2910, 2911, 2930; one of the former PSYC 3250, 3810, 3830, 3840, or 3860; 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
3. Biology or Psychology 499A/B.
4. Biochemistry 2201 or the former 2101,3206 or 3106 .
5. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
6. Mathematics 1000 and 1001; Physics 1020 (or 1050) and 1021 (or 1051); Chemistry 1050 (or 1200), 1051 (or 1001), 2400, and 2401.
7. Other courses, if necessary, to complete at least 120 credit hours of courses.

Note: As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of " $B$ " or better, OR average of $75 \%$ or higher in all the required courses listed in Clauses 1, 2, 3, and 4 above, except those at the 1000 level.

### 10.2.11 Biology and Statistics Joint Honours

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, the following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1000 and 1001, Biology 1001 and 1002, Chemistry 1050 and 1051 (or 1200 and 1001, or 1010 and the former 1011), Physics 1020 and 1021, or equivalent;
3. Mathematics $2000,2050,2051$, Statistics 2500,2501 or $2560,3520,3521,4530$, and 4581 ;
4. 9 further credit hours in Statistics courses including at least 6 credit hours in courses at the 4000 level or higher but not including Statistics 459A/B;
5. Chemistry 2400 and 2401, Biochemistry 2201 or the former 2101 , and 3206 or 3106 ;
6. Biology 2060, 2250, 2600, 2900, one of 3401, 3402, 4245, or 4404. In addition, further Biology courses at the 2000, 3000 or 4000 level must be selected by the student in consultation with the supervisor to make up a minimum of 42 credit hours in Biology but not including Biology 499A or 499B;
7. Either Biology 499A/B or Statistics 459A/B; and
8. A computing course. Computer Science 1510 is recommended.

### 10.2.12 Chemistry and Earth Sciences Joint Honours

The following courses, including prerequisites, where applicable, will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1000 and 1001 , Earth Sciences 1000 and 1002, Chemistry 1050 and 1051 (or 1010, the former 1011 and the former 1031) (or 1200 and 1001) or their equivalents, Physics 1050 (or 1020) and 1051 (or 1021).
3. Earth Sciences 2030, 2031, 2401, 2502, 2702, 2905, 3420, 3600; plus 6 additional credit hours in 3000 -level Earth Sciences courses, and 9 additional credit hours in 4000 -level Earth Sciences courses.
4. Chemistry $2100,2210,2301,2302,2400,2401$ and 3110 ; and at least 6 additional credit hours in 3000 -level and 6 credit hours in 4000-level Chemistry courses.
5. Mathematics 2000 and 2050.
6. Biology 2120 and Biochemistry 2201 or the former 2101.
7. An Honours Dissertation (Earth Sciences 499A/B or Chemistry 490A/B). The topic of the Honours Dissertation must have the prior approval of the Heads of the two Departments. A faculty member of either Department may act as supervisor.
8. Other courses to complete the prescribed minimum of 120 credit hours.

Any change in the program of study must have the prior approval of the Heads of the two Departments concerned.

### 10.2.13 Chemistry and Physics Joint Honours

The following courses are prescribed:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics $1000,1001,2000,2050,3202$, and 2260.
3. Physics 1050 (or 1020 ) and $1051,2055,2750$ or $2056,2820,3220,3500,3750,3820,3900,4820,3$ additional credit hours in a Physics course numbered 3000 or higher and 6 additional credit hours in Physics courses numbered 4000 or higher.
4. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3210 or 3211,3303 , and 6 additional credit hours in Chemistry courses numbered 3000 or higher.
5. Biochemistry 2201 or the former 2101, or 2901.
6. An Honours Dissertation (Chemistry 490A/B or Physics $490 \mathrm{~A} / \mathrm{B}$ ). The topic of the Honours Dissertation must have the prior approval of the Heads of the two Departments. A faculty member of either Department may act as supervisor.
7. A sufficient number of elective courses to bring the degree total to 120 credit hours.

### 10.2.14 Computer Science and Geography Joint Honours

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, the following courses are required:

1. Computer Science Requirements

Forty-eight credit hours in Computer Science courses are required for the Joint Honours:
a. $1000,1001,1002,2001,2002,2003,2004,2005,2006,2007,2008$, the former 4751.
b. Six additional credit hours in courses at the 4000 level not including 4780 .
c. Twelve additional credit hours in courses at the 3000 level or beyond.
2. Geography Requirements

Forty-eight credit hours in Geography courses are required for the Joint Honours: 1050, 2001, 2102, 2195, the former 2226, 2302, 2425, 3202, 3222, the former 3226, 3250, 3260, 3303, 4202, 4250, 4261, and the former 4291.
3. Additional Requirements
a. Mathematics 1000, 1001, 2000, and 2050.
b. An Honours Dissertation (either Computer Science 4780 or Geography 4999). The topic for dissertation must be chosen with the prior approval of the Heads of both Departments.

### 10.2.15 Computer Science and Physics Joint Honours (B.Sc. only)

The following courses are prescribed:

1. Chemistry 1050 and 1051 (or Chemistry 1010, the former 1011, and the former 1031) (or 1200 and 1001).
2. a. Computer Science 1000, 1001,1002, 2001, 2002, 2003, 2004, 2005, 2006, 2007, $2008,3731$.
b. Nine additional credit hours in Computer Science courses numbered 3000 or higher, including at least 3 credit hours in courses at the 4000 level.
3. a. Physics 1050 (or 1020) and 1051.
b. Physics 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3750, 3800, and 3820.
c. Three additional credit hours in Physics at the 4000 level.
4. Physics 490A and Physics 490B or Computer Science 4780 and 3 additional credit hours in Computer Science at the 4000 level.
5. a. Mathematics 1000 and 1001.
b. Mathematics 2000, 2050, 2260, and 3202.
6. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
7. Two electives to bring the total credit hours to 120. Computer Science 2500 and Statistics 2550 are recommended.

The topic for the honours project or thesis, Computer Science 4780 or Physics $490 \mathrm{~A} / \mathrm{B}$, must be chosen with the prior approval of both departments.

### 10.2.16 Computer Science and Pure Mathematics Joint Honours

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, the following courses are required:
At least 51 credit hours in Computer Science courses are required including the following:

1. Computer Science 1000, 1001, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008.
2. Excluding 4780, 24 additional credit hours from courses numbered 3000 or higher, at least 9 credit hours of which must be in courses at the 4000 level.
The following courses in Mathematics and Statistics are required:
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3001, 3202, 3210, 3320, 3340, Statistics 2550.
4. Either Mathematics 4000 or 4001
5. Excluding the former Mathematics 3330, the former 4399, and 439A/B, 15 additional credit hours in courses offered by the Department of Mathematics and Statistics numbered 3000 or higher including at least 9 credit hours from courses numbered 4000 or higher and at least 9 credit hours in Pure Mathematics courses.
6. An Honours Dissertation in one of the departments, with the topic chosen in consultation with both departments.

Note: There is an Undergraduate Advisor in each Department. These advisors should be consulted on all academic matters.

### 10.2.17 Computer Science and Statistics Joint Honours

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, the following courses are required:

1. Mathematics $1000,1001,2000,2050,2051,2320,3340$, Statistics 1510 or 2500 or 2550,2410 or 3410,2501 or 2560, 3411, 3520, 3521, 3540, 4530, 4590.
2. Eighteen further credit hours in Statistics courses including at least 12 credit hours in courses numbered 4000 or higher, but not including Statistics 4581 and 459A/B.
3. Computer Science 1000, 1001, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 4734.
4. Twenty-one additional credit hours in Computer Science courses at the 3000 level or higher, not including 4780.
5. Either Computer Science 4780 or Statistics 459A/B.

### 10.2.18 Earth Sciences and Geography Joint Honours

The following courses will be required. A few prerequisites are not met by this list of courses, and students are advised to obtain advice from instructors in such cases to be sure that they are prepared for course material. Both departmental Heads can advise students on a workable sequencing of courses to complete the degree in a timely manner, and students should view a student handbook that describes thematic streams within the program and offers specific guidance about course selection.

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Geography 1050, Mathematics 1000 and 1001, Earth Sciences 1000 and 1002, Chemistry 1050 (or equivalent) and 1051 (or equivalent), Physics 1050 and 1051, or Physics 1020 and 1021.
3. Geography 2001 or 2302, and Geography 2102, 2195, the former 2226, 2425 and the former 3226, Earth Sciences 2401 or 2502, and Earth Sciences 2030, 2031, 2702 and 2905.
4. Mathematics 2000 or Statistics 2550 or Geography 3222, Biology 1001 and 1002, or Biology 2120 or Physics 2055.
5. Either Earth Sciences 499A and 499B, or the former Geography 4990 and Geography 4999.
6. At least an additional 40 credit hours from Earth Sciences and Geography, with a minimum of 16 credit hours from Earth Sciences and 18 credit hours from Geography; and a minimum of 9 credit hours at the 4000 -level in each discipline. Earth Sciences 2150, 2914, 2915, 2916, 2917, 2918, 4310, and 4950 cannot be used to fulfill this requirement. Geography 2105, 2290, 2405, 2460 and 2495 cannot be used to fulfill this requirement.
7. Additional credit hours selected to conform to the Degree Regulations for the Honours Degree of Bachelor of Science so as to achieve a total of 120 credit hours.
Notes: 1. The topic of the Honours dissertation must be chosen with the approval of both Departments. A faculty member of either Department may act as supervisor.
8. Any change in the program of study must have the prior approval of the Heads of both Departments concerned.
9. The number of specified courses means that the second CRW course will be taken normally in the second or third year of the program.
10. Students who do not satisfy the Graduation Requirements for the Honours Degree of Bachelor of Science, but who successfully complete all the courses, with the exception of the Honours dissertation, and who satisfy all other requirements for the Bachelor of Science, will be eligible for consideration to receive a General Degree of Bachelor of Science with a Joint Major in Earth Sciences and Geography.

### 10.2.19 Earth Sciences and Physics Joint Honours

This program was formerly in the Earth Sciences section of the Calendar as an Honours Degree of Bachelor of Science in Geophysics The following courses will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1000 and 1001, Earth Sciences 1000 and 1002, Chemistry 1050 and 1051 (or 1200 and 1001), Physics 1050 (or 1020) and 1051.
3. Earth Sciences 2030, 2401, 2502, 2702, 2905, 3170, 3172, 3420, 3905, 4171, 4173, 4179.
4. Physics 2055, 2750 or $2056,2820,3220,3230,3500,3820,4820$; plus 9 other credit hours in Physics courses at 3000 level or higher.
5. Mathematics 2000, 2050, 2260, and 3202.
6. Either Earth Sciences 499A/B or Physics 490A/B.
7. Other courses to complete at least a minimum of 120 credit hours.

Any change in the program of study must have the prior approval of the Heads of the two Departments concerned.

### 10.2.20 Geophysics and Physical Oceanography Joint Honours

The program requires the following courses:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001), Mathematics 1000 and 1001, Earth Sciences 1000 and 1002, Physics 1050 (or 1020) and 1051.
3. Earth Sciences $2905,3170,3172,4105,4171,4173,4179$ and 10 credit hours at the 2000 level or higher with at least 3 credit hours at the 3000 level.
4. Physics 2053, 2055, 2820, 3220, 3300, 3500, 3820, 4205, 4300, 4330, 4820 plus one of Physics $3600,3150,3400,3550$ or 3900.
5. Mathematics 2000, 2050, 2051, 2260, and 3202.
6. Either Earth Sciences 499A and 499B or Physics 490A and 490B.
7. Other courses to complete the prescribed minimum of 120 credit hours.

### 10.2.21 Marine Biology Joint Honours

The program is jointly administered by the Department of Ocean Sciences and the Department of Biology. To be eligible for admission, students would normally follow the requirements for the Joint Major in Marine Biology. Specifically, students must have completed Biology 2060, 2250, 2600, and 2900 and Ocean Sciences 2000 (or Biology 3710), 2001, 2100 and 2300 and obtained in these courses a grade of "B" or better, or an average of $75 \%$ or higher. Selection is based on academic performance in the required courses.
Students who wish to be admitted to this programs must submit an "Application for Admission to Honours Program Faculties of Humanities and Social Sciences or Science" to the Department of Biology and the Department of Ocean Sciences.
The following courses will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Mathematics 1000 ;
3. Earth Sciences 1000;
4. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550;
5. Physics 1020 and 1021 (or 1050 and 1051);
6. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001), and Chemistry 2400 and 2401;
7. Biochemistry 2201 or the former 2101;
8. Biology 1001, 1002, 2060, 2122, 2250 (or Biochemistry 2100), 2600, 2900, 3710 (or Ocean Sciences 2000) and 3711;
9. Ocean Sciences 1000, 2000 (or Biology 3710), 2001, 2100, 2300 and 2500 ;
10. Additional courses to complete a required 69 combined credit hours in Biology and Ocean Sciences with a minimum of 30 credit hours in either subject (except Biology 2040, 2041, 2120, 3053, and 3820). A minimum of 9 credit hours in Biology at the 3000/4000 level and 15 credit hours in Ocean Sciences at the 3000/4000 level is required;
11. Either Biology 499A and 499B or Ocean Sciences 499A and 499B; and
12. A sufficient number of elective courses to bring the degree total to 120 credit hours.

Courses cross listed between Biology and Ocean Sciences can only count for one subject or the other.
A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.

### 10.2.22 Pure Mathematics and Statistics Joint Honours

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, the following courses are required:

1. Mathematics $1000,1001,2000,2050,2051,2130,2260,2320,3000,3001,3202,3210,4000$, Statistics 1510 or 2500 or 2550 , 2410 or 3410, 2501 or 2560, 3411, 3520, 3521, 4402, 4410, 4530;
2. A computing course early in the program is required. Computer Science 1510 is highly recommended;
3. Either Mathematics 439A/B or Statistics 459A/B;
4. One of Mathematics 3331 or 3340 ;
5. Eighteen further credit hours in Pure Mathematics and/or Statistics courses numbered 3000 or higher, excluding the former Mathematics 3330, of which at least 12 credit hours must be from courses numbered 4000 or higher excluding Statistics 4581 .

### 10.3 Joint Options

### 10.3.1 Chemistry and Physics Option Programs

Students who complete all program requirements for the Chemistry and Physics Joint Honours program, either as Honours students or otherwise, except those on Academic Standing for the Honours Degree of Bachelor of Science, shall receive on their University records a notation that they followed the "Physics/Chemistry" Option Programs.
Students who intend to follow a Joint Degree program are strongly recommended to consult the Head of the Department or delegate at their earliest opportunity to ensure proper planning of their course sequence.

## 11 Program Regulations

### 11.1 Biochemistry

www.mun.ca/biochem
The following undergraduate programs are available in the Department:

1. Biochemistry and Cell Biology Joint Honours
2. Biochemistry and Chemistry Joint Honours
3. Biochemistry and Physics Joint Honours
4. Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours
5. Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours
6. Major or Honours in Biochemistry
7. Major or Honours in Nutrition
8. Minor in Biochemistry

Students who wish to enrol in any of these programs should plan their program well in advance so that they will have taken the appropriate prerequisites. Entry to a number of required courses is limited and will be determined by academic performance. Required courses should be taken in the year indicated by the course numbers so as to avoid timetable clashes and missing prerequisites which could prolong the time necessary to complete the program. Students are advised to consult with the Department at the earliest opportunity.
Candidates for the general and honoûrs degrees in the programs above should refer to the Faculty of Science Degree Regulations for the General and Honours degrees of Bachelor of Science.
Candidates for a Minor in Biochemistry should refer to Degree Regulations, Minor Programs in the Faculty of Science.
Students who intend to pursue graduate studies should take the courses leading to the honours degree.
Biochemistry course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Biochemistry. Students are encouraged to choose a minor.
For the purposes of a Major, Honours, or Minor degree in Biochemistry, Medicine 310A/B and Chemistry 2400, 2401 count as Biochemistry courses. For the purposes of a Major or Honours degree in Biochemistry(Nutrition), Medicine 310A/B count as Biochemistry courses.
Supplementary examinations will be allowed in certain Biochemistry courses which have written final examinations. Students should refer to Supplementary Examinations in the Faculty of Science section for details.

### 11.1.1 Admission to Programs in Biochemistry

Students who wish to declare a Major in Biochemistry or Biochemistry (Nutrition) or who wish to apply for Honours standing in any of our programs are strongly recommended to do so by May 31 in any year. Failure to apply by the recommended date may result in your application not being processed before your registration time. In addition, students who do not declare by this date might not be considered for departmental scholarships or other awards.

### 11.1.1.1 Admission to the Major in Biochemistry

Entry to the Biochemistry Majors program is based on academic standing.

1. To be considered for admission to the program students must have at least 30 credit hours in courses and have successfully completed the following courses (or their equivalents) with a minimum overall average of $60 \%$. In addition, students must be eligible for entry to Chemistry 2400.
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Chemistry 1050 and 1051 (or 1200 and 1001)
c. Mathematics 1000, 1001 (or Mathematics 1090, 1000, or Mathematics 109A/B, 1000)
d. Physics 1050 (or 1020), 1051 (or 1021), or Biology 1001, 1002

Notes: 1. Students taking Mathematics 1000 should take Physics 1050 as their first Physics course.
2. It is recommended that students who wish to pursue future studies in biophysics or related fields or who are considering postgraduate health professional programs take Physics 1050 as their first Physics course.

### 11.1.1.2 Admission to the Honours Degree in Biochemistry

Students normally should apply for an Honours program at the completion of their third year of studies. To be eligible for admission, students must be in Honours standing as per Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science. To be considered for early admission to an Honours program in Biochemistry at the end of second year, students must have achieved at least $70 \%$ in each of Biochemistry 2200 (or the former 2100) and Biochemistry 2201 (or the former 2101) and Chemistry 2400, 2401.

### 11.1.1.3 Admission to the Major in Nutrition

Entry to the Nutrition majors program is based on academic standing.

1. To be considered for admission to the program students must have at least 30 credit hours in courses and have successfully completed the following courses (or their equivalents) with a minimum overall average of $60 \%$.
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Chemistry 1050, 1051 (or Chemistry 1010, 1050 or Chemistry 1200, 1001)
c. Mathematics 1090, 1000 (or Mathematics 109A/B, 1000, or Mathematics 1000 and one elective)
d. Biology 1001, 1002 or Physics 1020, 1021 (or 1050 1051)

### 11.1.1.4 Admission to the Honours Degree in Biochemistry (Nutrition)

Students normally should apply for an Honours program at the completion of their third year of studies.
To be eligible for admission to the Honours program, students must be in Honours standing as per Academic Standing in the Degree
Regulations for the Honours Degree of Bachelor of Science. To be considered for early admission to an Honours program in Nutrition at the end of second year, students must have achieved at least $70 \%$ in each of their required 2000 level Biochemistry and Chemistry courses.

### 11.1.2 Regulations for Programs in Biochemistry

### 11.1.2.1 Major in Biochemistry

Entry to the Nutrition majors program is based on academic standing.

1. Required courses to complete the major:
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Biology 1001 and 1002; Mathematics 1000, 1001, Physics 1050 (or 1020), 1051 (or 1021); Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
c. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3108, 3206, 3207, and 3906 or 3907.
d. At least 9 credit hours in courses from Biochemistry 4002, 4101, 4103, 4104, 4105, 4200, 4201, 4230, 4231-4239.
e. Six additional credit hours chosen from: Medicine 310A/B, Biochemistry 2600, Biology 2060, 3050, Chemistry 4201, 4701 or Biochemistry courses at the 3000 or 4000 level.
f. Chemistry 2301 or Physics 2053, Chemistry 2400, 2401.
g. One of Chemistry 2100, Environmental Sciences 3210.
h. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the degree total up to 120 credit hours.

### 11.1.2.2 Honours Degree in Biochemistry



1. Required courses:
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Biology 1001 and 1002; Mathematics 1001; Physics 1050 (or 1020), 1051 (or 1021); Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
c. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3108, 3206, 3207, 3906, 3907, 4102, 499A, 499B, Medicine 310A/B and either Biochemistry 4210 or 4211.
d. Nine credit hours in courses from Biochemistry 4002, 4101, 4103, 4104, 4105, 4200, 4201, 4230, 4231-4239.
e. At least 6 credit hours chosen from Biochemistry 2600, Biology 3050, Chemistry 4201, 4701 or Biochemistry courses at the 3000 or 4000 level
f. Chemistry 2301 or Physics 2053, Chemistry 2400, 2401.
g. One of Chemistry 2100, Environmental Sciences 3210.
h. Statistics 2550 or equivalent.
i. A sufficient number of elective courses to bring the total for the degree up to 120 credit hours.
2. Those courses in which a grade "B" or an average of $75 \%$ or higher are required, as specified under clause 1. of Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science, are 48 credit hours from those listed in clauses 1.c., and d. above.

### 11.1.2.3 Minor in Biochemistry

1. Students who take a minor in Biochemistry will complete:
a. Biochemistry 2201, 2901, 3206.
b. One of Biochemistry 2200, 2600, Biology 2250.
c. Six credit hours in Biochemistry at the 3000 or 4000 level.
d. Chemistry 2400 and either Chemistry 2401 or one additional Biochemistry course at the 3000 or 4000 level.

Course prerequisites stipulated in the course descriptions shall apply to a minor in Biochemistry.

### 11.1.2.4 Major in Nutrition

1. Required courses:
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Biology 1001 and 1002; Mathematics 1000, Physics 1020 and 1021 (or Physics 1050 and 1051); Chemistry 1050 , 1051 (or Chemistry 1200 and 1001).
c. Biochemistry 2005, 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3906, 4300, 4301, Medicine 310A/B.
d. Six credit hours in courses from Biochemistry 3052, 3108, 3207, 3402, 3600, 3907, 4002, 4105, 4200, 4230, 4240, 4241-4249, Biology 3050.
e. Chemistry 2400.
f. Statistics 2550 or equivalent.
g. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the total for the degree up 120 credit hours.

### 11.1.2.5 Honours Degree in Nutrition

1. Required courses:
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses
b. Biology 1001 and 1002; Mathematics 1000, Physics 1020 (or 1050) and 1021 (or 1051); Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
c. Biochemistry 2005, 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3207, 3906, 4300, 4301, 4502, 499A, 499B, Medicine 310A/ B.
d. Nine additional credit hours chosen from Biochemistry 3052, 3108, 3402, 3600, 3907, 4002, 4105, 4200, 4201, 4230, 4240, 4241-4249, Biology 3050.
e. Chemistry 2400
f. Statistics 2550

g. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the total for the degree up 120 credit hours.
2. Those courses in which a grade " B " or an average of $75 \%$ or higher are required, as specified under clause 1 . of Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science, are 51 credit hours from those listed in clauses 1.c., and d. above.

### 11.2 Biology

## www.mun.ca/biology

The following undergraduate programs are available in the Department:

1. Biochemistry and Cell Biology Joint Honours
2. Biology and Earth Sciences (Geology) Joint Honours
3. Biology and Psychology Joint Honours
4. Biology and Psychology (Behavioural Neuroscience) Joint Honours
5. Biology and Statistics Joint Honours
6. Biology Concentrations
7. Joint Major or Joint Honours in Marine Biology
8. Major or Honours, or Major (Co-operative) or Honours (Co-operative), in Biology
9. Minor in Biology

Details of joint programs are given in Joint Program Regulations.
Biology course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Biology.
For the purposes of a Major, or Honours degree in Biology, Medicine 310A/B count as Biology courses.

### 11.2.1 Entrance Requirements

Entry to the Biology Majors Program is competitive and based on academic standing.
To be considered for admission to the program students must have completed Biology $1001 / 1002$ with an average of at least $65 \%$. In addition, applicants will normally have completed the following courses (or their equivalents) and must have a minimum overall average of $60 \%$ in these courses.

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Mathematics 1090 and Mathematics 1000 (or Mathematics $109 \mathrm{~A} / \mathrm{B}$ and Mathematics 1000 , or Mathematics 1000 only)
3. Chemistry 1050 and 1051 (or 1200 and 1001, or 1010 and the former 1011) (or Physics 1020/1021 (or equivalent)

## 4. If Mathematics 1000 taken, any one other first year course.

Chemistry 1050 and 1051 (or 1200 and 1001) should be taken in the first year, as it is a prerequisite for other required courses in the programs, and delaying chemistry until second year may make it difficult to complete the program in the normal eight semesters.

### 11.2.2 Minor in Biology

A minor in Biology will consist of 24 credit hours in Biology courses: 1001 and 1002 (or equivalent) plus any 18 credit hours chosen from the list of Biology courses except Biology 2040, 2041, 2120, 3053, and 3820. The choice of courses must be made in consultation with the Academic Program Officer and it is recommended (but not required) that students take at least two Biology courses at the 3000 level or above.

### 11.2.3 General Degrees

Each Major is assigned an academic advisor who should be consulted on academic problems, including course selection.

### 11.2.3.1 Major in Biology

All students majoring in Biology are required to complete a minimum of 45 credit hours in courses from the Department of Biology offering. Those 45 credit hours must include: Biology 1001 and 1002 or their equivalents; the 15 credit hours in core courses listed below; and 24 credit hours in Biology electives at the 2000, 3000 or 4000 level except Biology 2040, 2041, 2120, 3053, and 3820.
Biology Core ( 15 credit hours): Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404.
A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.
All majors must also successfully complete the following courses or their equivalents:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses
2. Physics 1020 and 1021 (or equivalent)
3. Mathematics 1000
4. Chemistry 1050 and 1051 (or 1200 and 1001, or 1010 and the former 1011), Chemistry 2400 and 2401
5. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
6. Biochemistry 2201 or the former 2101, and 3106 or 3206
7. Extra Science courses as necessary to fulfil the requirement for 78 credit hours in Science as stipulated under Electives in the

Degree Regulations for the General Degree of Bachelor of Science.
It is recommended, but not required, that a Computer Science course be included and the Department of Biology strongly recommends Computer Science 1000 or 1600.
Note: To minimize timetabling problems, students on the St. John's campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and 2060 and 2900 in their fourth semester (Winter).

### 11.2.3.2 Major in Biology (Co-operative) Program (BCOP)

This program is available to full-time Biology majors only.
The Biology (Co-operative) Program (BCOP) provides an opportunity for students to learn valuable practical skills while working in fields related to Biology. Students complete three Work Terms, which consist of full-time, normally paid employment in the field of Biology of at least 12 weeks in duration. The timing of the Work Terms is such that employers stand to gain from the acquired skills of biology majors in training. The objectives of the Work Term component of the BCOP are embodied in the Work Term descriptions found at the end of the Faculty of Science section under Course Descriptions, Biology, Work Term Descriptions

## 1. Admission Requirements

a. Admission is limited, competitive, and selective.
b. The primary criteria used in reaching decisions on applications for admission are motivation and overall academic achievement. Students may be required to participate in an interview as part of the selection process.
c. A student must first be admitted to the Biology Major.
d. Application deadline: October 15 for the following Spring semester work term (normally the third semester in year two).
e. To be eligible for admission, a student must have completed the second year Biology Core, with an overall average of at least $65 \%$, and an overall average of at least $65 \%$ in all Biology courses before the start of the first work term. A student must have an overall average of $65 \%$ in all other required courses, and must be registered as a full- time student in the semester in which application is made.

## 2. Program of Study

a. In addition to the requirements below, a student must fulfill all requirements for a Major in Biology or Honours in Biology.
b. Students' status in the program is assessed at the end of each semester. To remain in BCOP, a student must receive a passing grade in all required courses, and must maintain an overall average of at least $65 \%$ in all Biology courses and an overall average of at least $65 \%$ in all courses, including electives. A student who fails a required course, fails to maintain an overall average of $65 \%$ in Biology courses, or fails to maintain an overall average of $65 \%$, will be required to withdraw from BCOP. The student in question may apply for readmission in a subsequent year after passing the specified required course(s) previously failed, or reestablishing the required average.
c. A student is required to complete three work terms, one of which will normally be either in the Fall or Winter semester.

## 3. Work Term Placement

a. General management of the BCOP is the responsibility of the designated Academic Staff Member in Co-operative Education (ASM-CE), ASM-CE's are responsible for facilitating the engagement of potential employers in the program, organizing competitions for Work Term employment, arranging job interviews and facilities, managing the co-op data base, and developing employment opportunities and monitoring and evaluating students during the work term.
b. Students are ultimately responsible for securing their work term placements. ASM-CEs provide support for the job search and inform students of potential opportunities.
A student who is admitted to the co-op program gives permission to the University to provide a copy of the applicant's resume, university transcript and work term evaluations to potential employers.
d. A student who has been accepted to BCOP may independently obtain a work term placement in consultation with the ASM-CE. Such employment positions must satisfy the criteria for work terms, be confirmed in writing by the employer and be approved by the ASM-CE before the first day of the work term according to the University Diary.
4. Registration and Evaluation of Performance
a. In Work Terms I, II, and III, a student must register for Biology 199W, 299W, and 399W respectively.
b. The Work Term evaluations shall consist of two components:
i. On-the-job Student Performance:

Job performance shall be assessed by Co-operative Education in consultation with the department using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought. Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
ii. Assignment(s):

- A student is required to submit one or more assignment(s) to Co-operative Education as outlined in the course syllabus.
- Assignment(s) are evaluated by a faculty member and an ASM-CE.

Evaluation of the work term assignment(s) will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
The evaluation of the job performance and the assignment(s) are recorded separately on the transcript. Overall evaluation of the work term will result in one of the following final grades being awarded:

- Pass with Distinction: Indicates OUTSTANDING PERFORMANCE in both the assignment(s) and the job performance.
- Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the assignment(s) and the job performance.
- Fail: Indicates FAILING PERFORMANCE in the assignment(s) or the job performance, or both. To remain in BCOP, a student must obtain a final grade of Pass or higher.
c. If a student fails to achieve the Work Term standards specified above, the student will be required to withdraw from BCOP. Such a student may reapply to the program, at which time the student will be required to repeat the Work Term with satisfactory performance. Only one Work Term may be repeated in the entire program.
d. A student who withdraws from a Work Term without acceptable cause subsequent to a job placement will be required to withdraw permanently from BCOP.
e. A student who drops a Work Term without prior approval from both Co-operative Education and the Biology Co-op Liaison, or who fails to honour an agreement to work with an employer, or who conducts in such a manner as to cause the discharge from the job, will be awarded an overall grade of FAIL for the Work Term in question and will be required to withdraw permanently from BCOP.
f. Permission to drop a Work Term does not constitute a waiver of degree requirements, and a student who has obtained such permission must complete an approved Work Term in lieu of the one dropped.


### 11.2.4 Honours Degrees

The attention of students wishing to take Honours is called to those sections of the Calendar dealing with the Degree Regulations for the Honours Degree of Bachelor of Science.
Sixty-nine credit hours in courses, including the 6 first year credit hours and the 15 required core credit hours outlined in the regulations for the General Degree, and the Honours Dissertation (Biology 499A/499B), shall be taken from the Department of Biology offering. Students may elect to complete an Honours Program in Biology or one of the Joint Honours Programs listed at the start of the Biology section of the Calendar. Programs of students taking Honours shall be drawn up in consultation with the student's supervisor, and must be approved by the Head of the Department (or delegate).
Note: Some Graduate Courses may be taken in the final year of the Honours Program with the permission of the Head of the Department and the course instructor.
A dissertation ( 6 credit hours) is to be presented on some original piece of work undertaken by the candidate, under the guidance of a faculty member of the department, as appointed by the Head of Department. For students electing to take one of the Joint Honours Programs, the dissertation shall be on a topic representative of the selected program. The Department of Biology considers the dissertation to be an important part of the Honours Program.
The dissertation will be based on a 6 credit hours course (Biology 499A/499B). It will involve directed reading relevant to the dissertation topic, preparation of a dissertation outline, supervised research, data synthesis and interpretation, and preparation and defence of the dissertation.
Two typed copies of the dissertation, complete with figures and tables, are to be submitted not less than two weeks before the end of lectures in the semester in which the candidate is registered for Biology 499B. These copies must be submitted to the Head of Department, and must have met the prior approval of the candidate's Honours supervisor.
Before the last day for examinations in the semester, the candidate will be examined orally on the contents of the dissertation. The examining committee shall consist of the Head of the Department, or delegate, the candidate's supervisor, and an examiner appointed by the Head of the Department in consultation with the candidate's supervisor.

### 11.2.4.1 Honours in Biology

An Honours degree in Biology may comprise a broadly based selection of courses according to the student's interests, or it may be more narrowly focussed. An Honours student may focus on any area of Biology where an appropriate supervisor can be found. All Honours students should choose courses in consultation with their supervisors, but it is particularly important that students wishing to focus within the Honours degree should discuss course selection with an Honours supervisor within their area of interest.

## 1. Biology Course Requirements:

Students seeking an honours degree in Biology are required to successfully complete a minimum of 69 credit hours in courses from the Department of Biology offering. Those 69 credit hours must include:
a. Biology 1001 and 1002 or their equivalents;
b. 15 credit hours in the following core courses: Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402,4245 or 4404 ; and
42 credit hours from Biology electives at the 2000, 3000 or 4000 level (except Biology 2040, 2041, 2120, 3053, and 3820) and Biology 499A and 499B.
d. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.
2. Core Course Requirements:

All honours students must also successfully complete the following courses or their equivalents:
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Physics 1020 and 1021 (or equivalent)
c. Mathematics 1000
d. Chemistry 1050 and 1051 (or 1200 and 1001, or 1010 and the former 1011), Chemistry 2400 and 2401
e. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
f. Biochemistry 2201 or the former 2101, and 3106 or 3206
g. Electives to make up 120 credit hours

To minimize timetabling problems, students on the St. John's Campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and Biology 2060 and 2900 in their fourth semester (Winter).

### 11.2.4.2 Honours in Biology (Co-operative)

1. Admission Requirements:

See Major in Biology (Co-operative)
2. Program of Study:
a. In addition to the requirements below, a student must fulfill all requirements for an Honours in Biology.
b. To remain in the Honours in Biology (Co-operative), a student must receive a passing grade in all required courses, and must maintain an average of at least $65 \%$ in all Biology courses and an overall average of at least $70 \%$ in all courses, including electives.
c. A student is required to complete three work terms, one of which will normally be either in the Fall or Winter semester.
3. Work Term Placement:

See Major in Biology (Co-operative)
4. Registration and Evaluation of Performance:

See Major in Biology (Co-operative)

### 11.2.5 Biology Concentrations

While meeting the requirements for a program in Biology, other than a Minor in Biology, students may choose to select courses in one of the following formal concentrations which, if completed, will be noted on the student's transcript.
Particular attention should be paid to necessary prerequisites when scheduling courses. Students should consult with the Academic Program Officer regarding the availability of courses applicable to their chosen concentration.

### 11.2.5.1 Applied Ecology and Conservation



Students selecting an Applied Ecology and Conservation concentration are required to complete 18 credit hours from the following courses:

1. Biology $4122,4307,4360,4405,4650,4651,4710,4810,4820,4911$

### 11.2.5.2 Aquatic Life

Students selecting an Aquatic Life concentration are required to complete 18 credit hours from the following courses:

1. Biology $3014,3050,3709,3710,3711,3712,3714,3715,4122,4601,4710,4750,4912$

### 11.2.5.3 Biological Tools and Techniques

Students selecting a Biological Tools and Techniques concentration are required to complete 18 credit hours from the following courses:

1. Biology 3050, 3709, 3950, 3951, 4270, 4360, 4405, 4605, 4606, 4607, 4710, 4770, 4810, 4820

### 11.2.5.4 Biology for Health Professions

Students selecting a Biology for Health Professions concentration are required to complete 18 credit hours from the following courses:

1. Biology $3050,3052,3500,3530,4010,4050,4200,4241,4245,4404,4550$
2. Medicine 310A/B

### 11.2.5.5 Comparative Biology

Students selecting a Comparative Biology concentration are required to complete 18 credit hours from the following courses:

1. Biology 3202, 3300, 3401, 3402, 3640, $3715,3750,4122,4620,4630,4701,4770,4910$

### 11.2.5.6 Evolutionary Ecology

Students selecting an Evolutionary Ecology concentration are required to complete 18 credit hours from the following courses:

1. Biology $3295,3715,3811,3951,4250,4270,4505,4620,4630,4701,4710,4800,4910$
11.2.5.7 Molecular, Microbial, and Cell Biology

Students selecting a Molecular, Microbial and Cell Biology concentration are required to complete 18 credit hours from the following courses:

1. Biology 3050, 3052, $3401,3402,3530,3950,3951,4050,4241,4250,4251,4404,4606$
2. Biochemistry 3207 $\qquad$ $\checkmark$

### 11.3 Chemistry

www.mun.ca/chem
The following undergraduate programs are available in the Department:

1. Applied Mathematics and Chemistry Joint Honours
2. Biochemistry and Chemistry Joint Honours
3. Chemistry and Earth Sciences Joint Honours
4. Chemistry and Physics Joint Honours
5. Major or Honours in Chemistry. (Option to complete a Minor in Applied Science - Process Engineering) (see Faculty of Engineering and Applied Science for details)
6. Minor in Chemistry

Minor in Chemistry for Faculty of Engineering Process Engineering Majors
7. Major or Honours in Computational Chemistry
8. Major or Honours in Chemistry (Biological)

The Majors and Honours in Chemistry and Chemistry(Biological), and the Joint Honours with Applied Mathematics, Biochemistry, Earth Sciences, and Physics are accredited by the Canadian Society for Chemistry.
Details of joint programs are given under Joint Programs.
Chemistry course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Chemistry.

### 11.3.1 Undergraduate Handbook

Additional information about the undergraduate program, individual courses and suggested timetables can be found in the Department of Chemistry Undergraduate Handbook which is available on the web at www.mun, ca/chem.

### 11.3.2 Faculty Advisors

Each student majoring in Chemistry will be assigned a Faculty Advisor who should be consulted on all academic matters. Individual programs must be drawn up in consultation with the advisor.
Note: Students who have obtained a grade of 3 or better on the Advanced Placement courses in Chemistry will normally be eligible for direct entry into Chemistry 1051 or second year courses. Such students must consult the Department before registration.

### 11.3.3 Minor in Chemistry

Students who take a minor in Chemistry will complete CHEM 1050 and 1051 (or 1010, the former 1011 and the former 1031) (or 1200 and 1001), CHEM 2100, 2210, 2301 or 2302, and 2400 , and 6 credit hours in other chemistry courses at the 2000 level or above.
For Engineering students completing the Process Engineering major, a minor in Chemistry will consist of Chemistry 1050, 1051, 2100, 2210, 2301 (or Engineering 4602), 2302, 2400 and 3 credit hours chosen from the remaining Chemistry courses at the 2000 level or above.

### 11.3.4 General Degree - Major in Chemistry

Students wishing to take a Major in Chemistry should consult those regulations of the Calendar dealing with Degree Regulations for the General Degree of Bachelor of Science. The courses required for a Major in Chemistry are:

1. Chemistry 1050 and 1051 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3110, 3210, 3211, 3303, and 3411.
2. Physics 1050 (or 1020 ) and 1051 (or 1021).
3. Mathematics $1000,1001,2000$, and 2050.
4. Biochemistry 2201 or the former 2101 and 2901.

Recommended courses: Mathematics 2051, Physics 2820 and/or 2750.
Students considering declaring Chemistry as their Major are encouraged to contact either the Head of the Department or the Deputy Head (Undergraduate Studies)
Chemistry Majors may complete a minor in Applied Science - Process Engineering. The requirements for this minor are detailed under Faculty of Engineering and Applied Science, Minor in Applied Science - Process Engineering.

### 11.3.5 Honours Degree in Chemistry

Students wishing to take Honours should consult those regulations of the Calendar dealing with Degree Regulations for the Honours Degree of Bachelor of Science.

### 11.3.5.1 Required Courses

1. CHEM 1050 and 1051 or ( 1010 , the former 1011 and the former 1031 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3110, 3210, 3211, 3303, 3411, and 490A/B.
2. 12 credit hours selected from the 4000 level Chemistry courses chosen in consultation with the $490 \mathrm{~A} / \mathrm{B}$ supervisor for chemistry.
3. Physics 1050 (or 1020) and 1051 (or 1021).
4. Mathematics 1000, 1001, 2000, and 2050.
5. Biochemistry 2201 or the former 2101, and 2901.

Chemistry Honours students may complete a minor in Applied Science - Process Engineering. The requirements for this minor are detailed under Faculty of Engineering and Applied Science, Minor in Applied Science - Process Engineering.

### 11.3.5.2 Other Information

1. Those courses in which a grade of B or an average of $75 \%$ or higher are required, as specified under Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science, are the courses beyond first year used to satisfy clause 1. under Required Courses above.
2. Recommended courses: Mathematics 2051, Physics 2820 and/or 2750.
3. A thesis based on a selected research topic carried out under the supervision of a member of the Department is to be submitted in the final year.
4. Chemistry 490A/B will normally require the equivalent of nine hours per week for two semesters. Registration in Chemistry $490 \mathrm{~A} / \mathrm{B}$ is restricted to those students who have honours standing. The Honours dissertation will be assessed by a committee comprising the supervisor and one other faculty member.
5. With approval of the Heads of the Chemistry and Biochemistry Departments prior to registration, a number of courses in Biochemistry may be substituted for a like number of Chemistry courses.
6. Prospective Honours students in Chemistry in their first year should take
a. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
b. Chemistry 1050 and 1051 (or 1200 and 1001).
c. Physics 1050 and 1051 or 1020 and 1021.
d. Mathematics 1000 and 1001.
e. Six credit hours in other courses.
7. Students should consult the Undergraduate Student Handbook for timetabling details.
8. Students completing first year requirements for either Chemistry or Mathematics via the three course options (i.e. Chemistry 1010, 1050, 1051, Mathematics 1090, 1000, 1001 (or 109A/B, 1000, 1001) instead of the two course options (Chemistry 1050, 1051, Mathematics 1000 , 1001) will require the corresponding number of extra credits to obtain an Honours degree.
9. Arrangements for subsequent years will depend on the other science subjects being studied and should be made in consultation with the Faculty Advisor.
10. Certain advanced courses may only be offered in alternate years. Candidates therefore should consult the Head of the Department before registration.
11. Certain Graduate courses may be taken in the final year of the Honours Program with the permission of the Head of the Department.
12. Details of Joint Honours programs with Biochemistry, Earth Sciences, Mathematics and Physics are outlined under Joint Programs.
13. Details of the Environmental Science (Chemistry Stream) Major or Honours are outlined under the Grenfell Campus section of the Calendar.

### 11.3.6 General Degree - Major in Computational Chemistry

Students wishing to take a Major in Computational Chemistry should consult those regulations of the Galendar dealing with Degree Regulations for the General Degree of Bachelor of Science.

### 11.3.6.1 Required Courses

1. Chemistry 1050 and 1051 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3210 or 3211, 3303, $4304,4305$.
2. Physics 1050 (or 1020) and 1051 (or 1021), and 2820.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2260 (or the former Mathematics 3260), and 3202.
4. Computer Science 1510 and 1001.
5. Computer Science 2500 and 2001.
6. Computer Science 3731 or Mathematics 3132.
7. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
8. A sufficient number of elective courses to bring the degree up to a total of 120 credit hours must also be completed.

### 11.3.6.2 Suggested Program of Study

Given appropriate circumstances the Major in Computational Chemistry program can be completed in four years. While students should consult the Undergraduate Handbook for further timetabling details, to complete the program in four years generally will require that students take the following courses in their first year:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or 1200 and 1001).
3. Physics 1050 (or 1020) and 1051 (or 1021).
4. Mathematics 1000 and 1001.
5. Computer Science 1510 and 1001.

### 11.3.7 Honours Degree in Computational Chemistry

Students wishing to take Honours in Computational Chemistry should consult those sections of the Calendar dealing with Degree Regulations for the Honours Degree of Bachelor of Science.

### 11.3.7.1 Required Courses

1. Chemistry 1050 and 1051 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3210 or 3211, 3303, 4304, and 4305.
2. Physics 1050 (or 1020) and 1051 (or 1021), and 2820.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2260 (or the former Mathematics 3260), and 3202.
4. Computer Science 1510 and 1001.
5. Computer Science 2500 and 2001.
6. Computer Science 3731 or Mathematics 3132.
7. Chemistry 490A/B.
8. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
9. 3 additional credit hours in Biochemistry, Chemistry, Computer Science, Mathematics, or Physics at the 2000 level or above.
10. A sufficient number of elective courses to bring the degree up to a total of 120 credit hours must also be completed.

### 11.3.7.2 Suggested Program of Study

Given appropriate circumstances the Honours in Computational Chemistry program can be completed in four years. While students should consult the Undergraduate Handbook for further timetabling details, to complete the program in four years generally will require that students take the following courses in their first year:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or 1200 and 1001).
3. Physics 1050 (or 1020) and 1051 (or 1021).
4. Mathematics 1000 and 1001.
5. Computer Science 1510 and 1001.

### 11.3.7.3 Other Information

1. Those courses in which a grade of B or an average of $75 \%$ or higher are required, as specified under Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science, are the courses beyond first year used to satisfy the required course list.
2. A thesis based on a selected research topic carried out under the supervision of a member of the Department is to be submitted in the final year.
3. Chemistry $490 \mathrm{~A} / \mathrm{B}$ will normally require the equivalent of nine hours per week for two semesters. Registration in Chemistry $490 \mathrm{~A} / \mathrm{B}$ is restricted to those students who have honours standing. The Honours dissertation will be assessed by a committee comprising the supervisor and one other faculty member.
4. Students completing first year requirements for any of Chemistry, Mathematics or Physics via the three course options (i.e. Chemistry 1010, 1050, 1051, Mathematics 1090, 1000, 1001 or 109A/B, 1000, 1001, Physics 1020, 1021, 1051) instead of the two course options (Chemistry 1050, 1051, Chemistry 1200, 1001, Mathematics 1000, 1001, Physics 1050, 1051) will require the corresponding number of extra credits to obtain an Honours degree.
5. Arrangements for subsequent years will depend on the other science subjects being studied and should be made in consultation with the Faculty Advisor.
6. Certain advanced courses may only be offered in alternate years. Candidates therefore should consult the Head of the Department before registration.
7. Certain Graduate courses may be taken in the final year of the Honours Program with the permission of the Head of the Department.

### 11.3.8 General Degree in Chemistry (Biological)

Students wishing to pursue a General Degree in Chemistry (Biological) are encouraged to contact the Department Head or the Deputy Head (Undergraduate Studies) as early as possible and should consult those regulations of the Calendar dealing with Degree Regulations for the General Degree of Bachelor of Science.

### 11.3.8.1 Required Courses

1. Chemistry 1050 and $1051,2100,2210,2301,2302,2400,2401,3110,3211$, and 4410.
2. At least 6 credit hours from Chemistry $3210,3303,3411$ or any 4000 -level Chemistry course.
3. Biology 1001, 1002, 2250, 2060, and 3050 and at least 6 credit hours chosen from Biology 3530, 3950, 3951, 4010, 4050, 4245, 4251, 4404, and Ocean Sciences 3002.
4. Biochemistry 2201 or the former 2101, 2901 and at least 6 credit hours from Biochemistry 3105, 3206 or 3106, 3207 or 3107, 4101, and 4201.
5. Mathematics 1000 and 1001. Statistics 2550 is strongly recommended.
6. Physics 1050 (or 1020) and Physics 1051 (or 1021).
7. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.

### 11.3.8.2 Other Information

In first year, prospective students for the General Degree in Chemistry (Biological) should complete:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051, Biology 1001 and 1002, Physics 1050 (or 1020) and Physics 1051 (or 1021), and Mathematics 1000 and 1001.
3. This program fulfills the first and second teachable requirements for admission into the Bachelor of Education (Intermediate/ Secondary) at this University with Chemistry and Biology as the first and second teachable subjects, respectively.
4. Students in the Chemistry (Biological) program are not able to also qualify for a minor in Biology.
5. Some courses listed under Required Courses above require one or more prerequisites that are not defined as part of the program.

### 11.3.9 Honours Degree in Chemistry (Biological)

Students wishing to take Honours should consult those sections of the Calendar dealing with Degree Regulations for the Honours Degree of Bachelor of Science. Students wishing to pursue an Honours Degree in Chemistry (Biological) are encouraged to contact the Department Head or the Deputy Head (Undergraduate Studies) as early as possible.

### 11.3.9.1 Required Courses

1. Chemistry 1050 and $1051,2100,2210,2301,2302,2400,2401,3110,3211,4410$ and $490 \mathrm{~A} / \mathrm{B}$.
2. At least 3 credit hours from Chemistry $3210,3303,3411$ or any 4000 -level Chemistry course not used to fulfill clause 3 . below.
3. At least 3 credit hours from Chemistry 4151, 4201, 4206, 4305, or 4701.
4. Biology 1001, 1002, 2060, 2250, and 3050 and at least 6 credit hours chosen from Biology 3530, 3950, 3951, 4010, 4050, 4245, 4251, 4404, and Ocean Sciences 3002.
5. Biochemistry 2201 or the former 2101, 2901 and at least 6 credit hours from Biochemistry 3105,3206 or 3106,3207 or 3107, 4101, and 4201.
6. Mathematics 1000 and 1001. Statistics 2550 is strongly recommended.
7. Physics 1050 (or 1020) and Physics 1051 (or 1021).
8. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.

### 11.3.9.2 Other Information

In first year, prospective students for the Honours Degree in Chemistry (Biological) should complete:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051, Biology 1001 and 1002, Physics 1050 (or 1020) and Physics 1051 (or 1021), and Mathematics 1000 and 1001.
3. Those courses in which a grade of B or an average of $75 \%$ or higher are required as specified under Academic Standing in the * Degree Regulations for the Honours Degree of Bachelor of Science, are the courses beyond first year used to satisfy clauses 1.-5. under Required Courses above.
4. Chemistry 490A/B will normally require the equivalent of nine hours per week for two semesters. Registration in Chemistry 490A/B is restricted to those students who have honours standing. The Honours dissertation will be assessed by a committee comprising the supervisor and one other faculty member. Chemistry 490A/B Projects are to be approved by the Head of the Department or delegate.
5. The Honours in Chemistry (Biological) program can be completed in four years. Students should consult the Undergraduate Student Handbook for timetabling details.
6. Students completing first year requirements for any of Chemistry, Mathematics, or Physics via the three course options (i.e. Chemistry 1010, 1050, 1051 (or 1010,the former 1011, and the former 1031), Mathematics 1090, 1000, 1001, Physics 1020, 1021, 1051) instead of the two course options (Chemistry 1050, 1051, Mathematics 1000, 1001, Physics 1050, 1051) will require the corresponding number of extra credits to obtain an Honours degree.
7. With the permission of the Head of the Department, 6000 -level courses may be taken in the final year of the Honours Program.
8. This program fulfills the first and second teachable requirements for admission into the Bachelor of Education (Intermediate/ Secondary) at this University with Chemistry and Biology as the first and second teachables, respectively.
9. Students in the Chemistry (Biological) program are not able to also qualify for a minor in Biology.
10. Some courses listed under Required Courses above require one or more prerequisites that are not defined as part of the program.

### 11.3.10 Course Restrictions

Students should be aware of a number of credit restrictions. For further information see the Chemistry course descriptions section found at the end of the Faculty of Science section under Course Descriptions, Chemistry.

### 11.4 Computer Science

www.mun.ca/computerscience
The following undergraduate programs are available in the Department:

1. Applied Mathematics and Computer Science Joint Major
2. Computer Science Honours (B.A., B.Sc.)
3. Computer Science and Economics Joint Major
4. Computer Science and Geography Joint Honours
5. Computer Science and Geography Joint Major
6. Computer Science and Physics Joint Honours (B.Sc. only)
7. Computer Science and Physics Joint Major (B.Sc. only)
8. Computer Science and Pure Mathematics Joint Honours
9. Computer Science and Pure Mathematics Joint Major
10. Computer Science and Statistics Joint Honours
11. Computer Science and Statistics Joint Major
12. Computer Science (Software Engineering) Honours (B.Sc. only)
13. Co-operative Internship in Computer Science (CICS)
14. Major in Computer Science
15. Major in Computer Science (Smart Systems) (B.Sc. only)
16. Major in Computer Science (Visual Computing and Games) (B.Sc. only)
17. Minor in Computer Science

Details of joint program offerings may be found in the Faculty of Science section under Joint Program Regulations.
Computer Science course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Computer Science.

### 11.4.1 Admission to Major Programs

Admission to the Major programs in the Department of Computer Science is competitive and selective. Students who wish to enter these programs must submit a completed application form to the Department of Computer Science by June 1 for Fall semester registration.

### 11.4.1.1 Admission to the Bachelor of Science Program in Computer Science

To be eligible for admission to a Bachelor of Science program in Computer Science, students must have normally completed 24 credit hours as listed below:

1. Computer Science 1001, 1002.
2. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
3. Mathematics 1000 and 1001 (or 1090 and 1000).
4. Six credit hours to satisfy the second Science requirement.

Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance, normally cumulative average and performance in recent courses.

### 11.4.1.2 Admission to the Bachelor of Arts Program in Computer Science

To be eligible for admission to a Bachelor of Arts program in Computer Science, students must have normally completed 24 credit hours as listed below:

1. Computer Science 1001, 1002.
2. Six credit hours to satisfy the Critical Reading and Writing (CRW) requirement, including at least 3 credit hours in English courses.
3. Six credit hours to satisfy the Language Study requirement.
4. Mathematics 1000 and 1001 (or 1090 and 1000).

Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance, normally cumulative average and performance in recent courses.

### 11.4.2 Admission to Honours Programs

The Honours programs in the Department of Computer Science are designed for students who would like to concentrate their studies or pursue graduate work. Students who wish to be admitted to these programs must submit an "Application for Admission to Honours Program Faculties of Humanities and Social Sciences or Science" to the Department of Computer Science by June 1 for Fall semester registration. To be eligible for admission, students must have completed all Computer Science core requirements (Computer Science $1001,1002,1003,2001,2002,2003,2004,2005,2006,2007$, and 2008) and obtained in these courses a grade of "B" or better, or an average of $75 \%$ or higher. Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance in the required courses. In special circumstances, students may be admitted to Honours Programs at times other than June.
Students are advised to consult the Bachelor of Arts (Honours) Degree Regulations or Degree Regulations for the Honours Degree of Bachelor of Science (as appropriate).

### 11.4.3 Major in Computer Science

As a component of the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate, a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science
a. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008.
b. At least 6 additional credit hours in Computer Science at the 4000 level.
c. Twelve additional credit hours in Computer Science at the 3000 level or beyond.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: Students are encouraged to take Mathematics 3000 and Statistics 2560.

### 11.4.4 Major in Computer Science (Smart Systems) (B.Sc.only)

As a component of the Degree Regulations for the General Degree of Bachelor of Science a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science (Smart Systems):
a. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008;
b. Computer Science 3200, 3201, 3202 and 3301; and
c. Six additional credit hours in Computer Science courses selected from Computer Science 3401, 3550, 4301, 4303, $4750,4766$.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

### 11.4.5 Major in Computer Science (Visual Computing and Games) (B.Sc. only)

As a component of the Degree Regulations for the General Degree of Bachelor of Science a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science (Visual Computing and Games):
a. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008;
b. Computer Science 3300, 3301, and 4300;
c. Six additional credit hours in Computer Science courses selected from Computer Science 2300, 3200, 4301, 4302, 4303, 4304; and
d. Three additional credit hours in Computer Science courses selected from those listed in c. above, or Computer Science 2100 , 4766, 4768.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

### 11.4.6 Honours in Computer Science

1. See Bachelor of Arts (Honours) Degree Regulations or Degree Regulations for the Honours Degree of Bachelor of Science (as appropriate).
2. Sixty-three credit hours in Computer Science courses are required for the Honours Degree in Computer Science, including:
a. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, and 4780.
b. Fifteen additional credit hours in Computer Science at the 4000 level.
c. Eighteen additional credit hours in Computer Science courses at the 3000 level or beyond.
3. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: Students are encouraged to take Mathematics 3000 and Statistics 2560.

### 11.4.7 Honours in Computer Science (Software Engineering) (B.Sc. Only)

Completion of the Honours in Computer Science (Software Engineering) Program does not qualify persons to hold the designation
"Professional Engineer" as defined by various Provincial Acts governing the Engineering Profession.

1. See Degree Regulations for the Honours Degree of Bachelor of Science.
2. Sixty-three credit hours in Computer Science courses are required for the Honours Degree in Computer Science (Software Engineering), including:
a. Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 4770, 4780.
b. Nine additional credit hours in Computer Science chosen from 4718, 4721, 4723, the former 4751, the former 4753, 4756, 4759, 4766 , and 4768
c. Nine additional credit hours in Computer Science at the 4000 level.
d. Twelve additional credit hours in Computer Science at the 3000 level or beyond.
3. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: The Honours project (4780) must be in the area of Software Engineering.

### 11.4.8 Minor in Computer Science

For a Minor in Computer Science, a student must complete at least 24 credit hours in Computer Science courses, including:

1. Computer Science 1001, 1002, 1003, 2001.
2. At least 6 credit hours selected from Computer Science 2002, 2003, 2004, 2005, 2006, 2007, 2008.
3. Three additional credit hours at the 3000 level or above.
4. Additional courses as necessary, at the 2000 level or above, to fulfill the requirement for 24 credit hours in computer Science.

### 11.4.9 Co-operative Internship in Computer Science (CICS)

The Co-operative Internship in Computer Science (CICS) provides an opportunity for qualified students to obtain rewarding placements that help them develop practical skills in a real work setting before graduation. The CICS is available to Computer Science Majors who will typically apply between their third and fourth year of studies.

### 11.4.9.1 Admission Requirements

In order to be considered for admission to the CICS, an applicant:

1. must be a declared Computer Science Major;
2. must be registered as a full-time student at the time of application;
3. must have successfully completed Computer Science 1000, 1001, 1002, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 6 credit hours at the 3000 level;
4. must have at least 15 credit hours remaining after the internship in order to satisfy degree requirements, 3 of which must be in Computer Science; and
5. is expected to return to University as a full-time student after the internship.

In addition to the above, admission is also subject to academic performance.

### 11.4.9.2 Internship Duration

Subject to the availability of job openings, a student may choose either an 8, 12 or 16 consecutive month internship period.

### 11.4.9.3 Internship Guidelines

1. Internship employment is normally organized by Co-operative Education; however, students who have been accepted to the CICS may also obtain their own internship placements. All placements are subject to the approval of Co-operative Education and of the Head of the Department of Computer Science.
2. Students who have applied to the internship program give permission to Co-operative Education to supply prospective employers with copies of their resume and transcript.
3. After being placed with an employer, students are not permitted to drop their internship without prior approval from Co-operative Education and the Head of the Department of Computer Science. Students who drop an internship without permission, who fail to honour an agreement to work with an employer, or who conduct themselves in such a manner as to cause their discharge from the placements, will normally be awarded a fail grade for the internship period and may not be permitted to reapply.
Note: Students should also refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).

### 11.4.9.4 Registration, Assessment of Performance, and Assignment of Grades

Students must register for the course Computer Science 3700 every semester during their internship.
Computer Science 3700 is a non-credit course open only to students who have been accepted into the Internship Program.
During the internship, the employer and intern will complete student performance evaluations every four months and will submit them to Co-operative Education. The final assessment of total work performed is the responsibility of Co-operative Education, and will be based upon both input from the employer and the intern's report(s).
The Internship evaluation shall consist of two components:

1. On-the-job Student Performance: Job performance shall be assessed by Co-operative Education in consultation with the Department using information gathered during the internship and input from the employer. Evaluation of the on-the-job student performance will result in one of the following classifications: PASS WITH DISTINCTION, PASS, FAIL.
2. Internship Report(s): Evaluation of the internship report will result in one of the following classifications: PASS WITH DISTINCTION, PASS, FAIL.
The evaluation of the on-the-job student performance and the internship report(s) are recorded separately on the transcript.
Overall evaluation of the internship will result in one of the following final grades being awarded:
3. PASS WITH DISTINCTION: indicates outstanding performance in both the internship report(s) and the on-the-job student performance. PASS WITH DISTINCTION has been awarded to each of the internship report(s) and the on-the-job student
performance.
4. PASS: indicates that performance meets expectations in both the internship report(s) and on-the-job student performance. The student meets the requirements of a passing mark in the final internship report and on-the-job student performance.
5. FAIL: indicates failing performance in either the internship report(s) or on-the-job student performance or both.

Also, the following will be noted in the transcript of the intern:

1. Requirements for the Co-operative Internship in Computer Science have been completed. Internship Duration: - months.
2. A grade of NC (No Credit) for Computer Science 3700 will be awarded in all semesters of the Co-operative Internship prior to the final Semester

### 11.4.9.5 CICS and Honours Program

In case a student is enrolled in both the Honours program and the CICS, the requirements of both must be met. Upon approval from the honours project supervisor within the Department, the employer and the Head of the Department of Computer Science, an internship project may be submitted as a component of an honours project. These arrangements must be made within the first semester of the Internship placement.

### 11.4.10 Supplementary Examinations

Supplementary examinations will be allowed in certain Computer Science courses which have written final examinations. Students should refer to Supplementary Examinations in the Faculty of Science section for details.

### 11.4.11 Faculty Advisors

The Department has an Undergraduate Advisor for Computer Science majors to consult with on academic matters.

### 11.4.12 Undergraduate Handbook

Additional information about the undergraduate Computer Science programs and courses can be found in the Computer Science Undergraduate Handbook available from the General Office, Department of Computer Science or from www.mun.ca/computerscience/.

### 11.5 Earth Sciences

www.mun.ca/earthsciences
The following undergraduate programs are available:

## 120 credit hour programs

1. Chemistry and Earth Sciences Joint Honours
2. Earth Sciences and Geography Joint Honours
3. Earth Sciences and Physics Joint Honours
4. Earth Sciences and Physics Joint Majo
5. General or Honours degrees in Earth Sciences
6. Geophysics and Physical Oceanography Joint Honours

135 credit hour program

1. Biology and Earth Sciences Joint Honours

24 credit hour program

1. Minor in Earth Sciences

- 

Although Honours programs can be completed in 120 credit hours, students who do not select the prescribed Common Block of Required Courses will normally need more than 120 credit hours to satisfy degree requirements.
Earth Sciences course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Earth Sciences.

### 11.5.1 Undergraduate Handbook

Additional information about the undergraduate program, individual courses and suggested timetables can be found in the Department of Earth Sciences Undergraduate Handbook which is available on the web at www.mun.ca/earthsciences.

### 11.5.2 Entrance Requirements

In order to be formally admitted to major programs in Earth Sciences, students must have successfully completed 3 first-year credit hours in each of the following departments: English, Mathematics, Earth Sciences, Chemistry and Physics; these courses must be selected from the list of required courses for degree programs in Earth Sciences. Students are encouraged to declare their major in their first year of study at the university.
Most of the 2000 level Earth Sciences courses that are required for major and minor programs in Earth Sciences have Physics and Chemistry prerequisites, and students are advised to complete these prerequisites in their first year of study.
Students will not normally be permitted entry to 3000 level (or above) Earth Sciences courses without having completed all 1000-level courses listed in the Common Block of Required Courses specified in Clause 1. in the Major Programs in Earth Sciences.

### 11.5.3 Minor in Earth Sciences

A Minor in Earth Sciences will consist of the following:

1. Earth Sciences 1000 and 1002.
2. Eighteen credit hours chosen from Earth Sciences courses at the 2000 level or higher with at least 5 credit hours from courses at the 2000 level. Credit hours from Earth Sciences 2150, 2311, 2914, 2915, 2916, 2917, 2918, 4310 and 4950 cannot be used to fulfil this requirement.
Due to the prerequisite structure, availability of courses at the 3000 level and higher depends on courses taken at the 2000 level (see Undergraduate Handbook for some options).

### 11.5.4 Major Programs in Earth Sciences

Programs in Earth Sciences consist of a Common Block of Required Courses (below), and additional courses that depend on the degree being sought.

### 11.5.4.1 Common Block of Required Courses

All majors in Earth Sciences must complete those courses specified in Clauses 1. through 4. Students should examine prerequisites of 3000 level courses in order to decide which course to select under Clauses 3. and 4

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses, Mathematics 1000 and 1001, Earth Sciences 1000 and 1002, Chemistry 1050 and 1051 or Chemistry 1200 and 1001, Physics 1050 and 1051 or Physics 1020 and 1021. Students are advised to consult the Department of Physics Course Descriptions section for credit restrictions
Students who intend or are required to complete higher level Physics courses must complete Physics 1051 as well, since it is a prerequisite for higher level Physics courses. Students should review the Department of Physics Calendar entry for these courses.
2. Earth Sciences 2030, 2031, 2401, 2502, 2702, 2905, 3420, 3905.
3. Mathematics 2000 or Statistics 2550.
4. Either Biology 2120 (or Biology 1001 and 1002); or both Physics 2055 and Physics 2820.

Students must ensure that the prerequisites for Earth Sciences courses are fulfilled. Great difficulties in timetabling may be encountered if the required first-year courses are not completed before the beginning of second year.

### 11.5.5 Honours B.Sc. Degree in Earth Sciences

Geoscientific careers vary widely in required background. The Honours B.Sc. program is designed with considerable choice in order that students may personalize their programs based on career goals. Note that the flexibility afforded by this program is not without limits. Some courses have prerequisites, and it is ultimately the student's responsibility to ensure that these prerequisites are satisfied. Students should consult faculty members and the departmental Student Handbook for guidance in selecting courses appropriate to particular career paths.
In addition to the Common Block of Required Courses listed under Major Programs in Earth Sciences, the following requirements must be completed to qualify for the Honours B.Sc. degree in Earth Sciences:

1. Earth Sciences 499A and 499B.
2. At least 27 additional credit hours from Earth Sciences courses at 3000 and/or 4000 levels with a minimum of 12 credit hours from courses at the 4000 level. Credit hours from Earth Sciences 4310 and 4950 cannot be used to fulfill this requirement.
3. Six credit hours from the Faculty of Science courses numbered 2000 or higher. Credit hours from Earth Sciences courses, courses that are cross-listed with Earth Sciences courses, and the former Physics 2050 are excluded. However, Physics 2820 is permitted.
4. Additional credit hours selected to conform with regulations for the Honours Degree of Bachelor of Science so as to achieve a total of 120 credit hours. Students are encouraged to complete a minor in another department
5. Three of the credit hours used to fulfill either requirement 3. or 4 . above must be from Biology, Chemistry, Computer Science, Statistics or Physics. They may be from Mathematics only if Mathematics 2000 has not been taken as part of the Common Block of Required Courses.

### 11.5.6 General B.Sc. Degree in Earth Sciences

In addition to the Common Block of Required Courses listed under Major Programs in Earth Sciences, the following requirements must be completed to qualify for the General B.Sc. degree in Earth Sciences:

1. Eighteen additional credit hours from Earth Sciences courses at 3000 and/or 4000 levels with a minimum of 9 credit hours from courses at 4000 level. Credit hours from Earth Sciences 4310, 4950 and 499A/B cannot be used to fulfill this requirement.
2. Six credit hours from Science Faculty courses numbered 2000 or higher. Credit hours from Earth Sciences courses, courses that are cross-listed with Earth Sciences courses, and the former Physics 2050 are excluded. However, Physics 2820 is permitted.
3. Additional credit hours selected to conform with regulations for the General Degree of Bachelor of Science so as to achieve a total of 120 credit hours. Students are encouraged to complete a minor in another department.
Students are advised that this is the minimum requirement for the General B.Sc. in Earth Sciences. Many provinces, including Newfoundland and Labrador, have legislation requiring registration of professional geoscientists. A basic requirement for registration is, in most cases, the course equivalent of an Honours B.Sc. degree. Students intending to make a career in Earth Sciences should consider taking the Honours Degree program of courses, regardless of whether honours standing is maintained.

### 11.5.7 Credit Restrictions for Present Earth Sciences (EASC) Courses with Former Courses

Credit Restrictions for Present Earth Sciences (EASC) Courses with Former Courses Table

| Present | Former Equivalents | Present | Former Equivalents |
| :---: | :---: | :---: | :---: |
| EASC 1000 | EASC 1010, Geology 1000, Geology 1010 | EASC 3611 | EASC 4611 |
| EASC 1001 | EASC 1011, Geology 1001, Geology 1011 | EASC 3705 | EASC 4700, Geology 3070 |
| EASC 2030 | EASC 203A, Geology 203A | EASC 3811 | EASC 3801, EASC 2801, Geology 2801 |
| EASC 2031 | EASC 203B, Geology 203B | EASC 4053 | Geology 4053 |
| EASC 2150 | Physics 2150 | EASC 4054 | EASC 4052, Geology 4052 |
| EASC 2401 | EASC 3400, EASC 3120, Geology 3120 | EASC 4171 | Physics 4171 |
| EASC 2502 | EASC 2501, EASC 3200, Geology 3200 | EASC 4179 | EASC 4970, Physics 4970 |
| EASC 2702 | EASC 3701, EASC 3070, Geology 3070 | EASC 4211 | Geology 4211 |
| EASC 2905 | EASC 2310, EASC 2300, EASC 2900, Geology 2900 | EASC 4302 | EASC 4501, Geology 4501 |
| EASC 2914 | EASC 2414, Geology 2414 | EASC 4310 | Geology 4310 |
| EASC 2915 | EASC 2415, Geology 2415 | EASC 4400 | EASC 4120, Geology 4120 |
| EASC 3054 | EASC 2503 and EASC 3053 | $\text { EASC } 4420$ | EASC 400A, EASC 4320, EASC 4901, Geology 400A |
| EASC 3055 | EASC 2503 and EASC 3053 | EASC 4502 | EASC 4201, Geology 4201 |
| EASC 3170 | Physics 3170 | EASC 4601 | Geology 4601 |
| EASC 3172 | EASC 3171, Physics 3171 | EASC 4800 | EASC 4110, Geology 4110 |
| EASC 3210 | Geology 3210 | EASC 499A | EASC 4991, Geology 4991 |
| EASC 3420 | EASC 2400, EASC 4901, EASC 2161, EASC 2070, Physics 2070 |  |  |

Notes: 1. Students wishing to pursue study within the programs offered by Earth Sciences are strongly advised to keep in close contact with the Department to discuss course programs before registration in order to maintain proper sequencing.
2. Students wishing to take some Earth Sciences courses without intending to major in Earth Sciences should consult with the Head of Department (or delegate) to determine the courses most suitable to their needs and capabilities. Earth Sciences 2914, 2915, 2916, 2917, 2918, and 2150 are especially suitable for such students and have no Earth Sciences prerequisites.
3. Most courses comprise six hours of instruction per week, usually three hours of lectures or seminars and a three-hour laboratory period; however, at an advanced level other methods of instruction may be adopted.
4. The field courses 2905, 3705, 3905 and 4905 require payment of a participation fee to cover costs for logistics and equipment. Registration for these courses will be by application only and may be competitive.
5. The prerequisites for courses 4302, 4902 and 4903 refer to core courses in the Faculty of Science. For the purposes of these prerequisite statements, core courses are defined as those courses that are specified by each department as mandatory to fulfil the course requirements for their General or Honours programs.
6. Certain 4000 level courses may not be offered every year.
7. At most 6 credit hours in courses at the 1000-level can be used towards the course requirements in Earth Sciences for the Major, Minor, Joint Major, Honours or Joint Honours.

### 11.6 Economics

The following programs are available in the Department of Economics:

1. Honours in Economics (B.A. or B.Sc.)
2. Honours in Economics (Co-operative), (B.A. or B.Sc.)
3. Joint Programs (B.Sc. Only)
4. Joint Program (Co-operative) (B.Sc. Only)
5. Major in Economics (B.A. or B.Sc.)
6. Major in Economics (Co-operative) (B.A. or B.Sc.)
7. Minor in Economics

For Departmental Regulations and Course Descriptions, see Faculty of Humanities and Social Sciences section of the Calendar.

### 11.7 Geography

The following undergraduate programs are available in the Department of Geography:

1. Diploma in Geographic Information Sciences
2. Focus Area in Geography
3. Honours in Geography (B.A., B.Sc)
4. Joint Programs
5. Major in Geography (B.A., B.Sc)
6. Minor in Geography (B.A., B.Sc)

For Departmental Regulations and Course Descriptions, see Faculty of Humanities and Social Sciences section of the Calendar.

### 11.8 Mathematics and Statistics

www.mun.ca/math
The following undergraduate programs are available in the Department:
Applied Mathematics and Chemistry Joint Honours (B.Sc. only)
Applied Mathematics and Computer Science Joint Major (B.Sc. only)
Applied Mathematics and Economics Joint Major (B.Sc. only)
Applied Mathematics and Physics Joint Honours (B.Sc. only)
Applied Mathematics and Physics Joint Major (B.Sc. only)
Biology and Statistics Joint Honours (B.Sc. only)
Computer Science and Pure Mathematics Joint Honours (B.Sc. only)
Computer Science and Pure Mathematics Joint Major (B.Sc. only)
Computer Science and Statistics Joint Honours (B.Sc. only)
. Computer Science and Statistics Joint Major (B.Sc. only)

1. Economics and Pure Mathematics Joint Major (B.Sc. only)
2. Economics and Statistics Joint Major (B.Sc. only)

Economics and Statistics (Co-operative) Joint Major (B.Sc. only)
. Honours in Applied Mathematics (B.Sc. only)
. Honours in Pure Mathematics
16. Honours in Statistics
17. Major in Applied Mathematics (B.Sc. only)
18. Major in Pure Mathematics
19. Major in Statistics
20. Minor in Mathematics
21. Minor in Statistics
22. Pure Mathematics and Statistics Joint Honours (B.Sc. only)

Details of Joint Major and Joint Honours programs are given under Joint Program Regulations
Mathematics and Statistics course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Mathematics and Statistics

### 11.8.1 Regulations

1. At most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit restrictions: Mathematics 1000, 1031, 1050, 1051, 1052, 1053, the former 1080, the former 1081, 1090, 109A/B, the former 1150 and 1151.
2. Students who have already obtained 6 or more credit hours in Mathematics or Statistics courses numbered 2000 or above should not register for Mathematics 1050 or Mathematics 1051 and cannot receive credit for either course.
3. Students with credits in Mathematics or Statistics not listed in this Calendar must consult the Department for equivalency before taking any course listed under Course Descriptions, Mathematics and Statistics.
4. Placement in Mathematics 1000, 1050, 1051, 1090, and 109A/B, shall be determined by the Department of Mathematics and Statistics on the basis of the student's score on the Mathematics Placement Test (MPT), SAT Subject Test in Mathematics Level 1 , or other acceptable criteria-based test.

### 11.8.2 Faculty Advisors

Normally, the Program Officer will be the advisor for each student who has undertaken a major in Applied or Pure Mathematics, and the Deputy Head (Statistics) will be the advisor for any student involved in a major in Statistics. Students should consult with their advisor at least once each semester to ensure that their choice of courses is appropriate.
Note: The Department of Mathematics and Statistics will endeavour to give appropriate advice to students registered in its programs. However, the Department points out that it is the responsibility of the student to see that the student's academic program meets the University's Regulations in all respects. Students are referred to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), Registration, Student Responsibility. The Department accepts no responsibility for any matter arising from an inappropriate and/or improperly recorded registration.

### 11.8.3 Course Numbering System

The subject area of all courses offered by the Department of Mathematics and Statistics is identified by the second digit of the course number: ,

## Second Digit

0 - Common Core Mathematics courses
1- Applied Mathematics courses
2 - Applied Mathematics and Pure Mathematics courses
3 - Pure Mathematics courses
4 - Pure Mathematics and Statistics courses
5 - Statistics courses

Unless otherwise specified, where a regulation makes reference to Mathematics courses, this shall include courses in any of the categories listed above.
Where a regulation makes reference to Applied Mathematics courses, this shall include all courses with second digit 1 or 2 . Where a regulation makes reference to Pure Mathematics courses, this shall include all courses with second digit 2,3 or 4 . Where a regulation makes reference to Statistics courses, this shall include all courses with second digit 4 or 5.

### 11.8.4 Major in Applied Mathematics (B.Sc. Only)

As a component of the Degree Regulations for the General Degree of Bachelor of Science, a student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2260, 2320, 3000, 3001, 3100, 3132, 3161, 3202, 4160, 4190.
2. Three credit hours in courses numbered 3000 or higher that are offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330.
3. A computing course, early in your program. Computer Science 1510 is highly recommended.
4. A designated technical writing course offered by a Science department. Mathematics 2130 is recommended. The technical writing course is prerequisite to some 3000-level courses.
5. Physics 1050 (or 1020) and 1051.
6. A statistics course. Statistics 2410 or 3410 is recommended.

### 11.8.5 Major in Pure Mathematics

As a component of the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate, a student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2320, 3000, 3001, 3320.
2. One of Mathematics 2260, 3202, 3210.
3. One of Mathematics 3331, 3370.
4. Twelve further credit hours in Pure Mathematics courses numbered 3000 or higher, excluding the former Mathematics 3260 and 3330, at least 6 credit hours of which must be in courses numbered 4000 or higher.
5. A computing course. Computer Science 1510 is recommended.
6. A designated technical writing course offered by a Science department. Mathematics 2130 is recommended.
7. A statistics course. Statistics 2410 or 3410 is recommended.

### 11.8.6 Major in Statistics

As a component of the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate, a student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, Statistics 2410 or $3410,2560,3411,3520,3521,4530$
2. Statistics 2500 or 2550 . Statistics 2550 is recommended.
3. Nine further credit hours in Statistics courses numbered 3000 or higher, at least 6 credit hours of which must be in courses numbered 4000 or higher excluding Statistics 4581.
4. A computing course. Computer Science 1510 is recommended.
5. Mathematics 2320, 3000 and 3001 are recommended.

### 11.8.7 Honours in Applied Mathematics (B.Sc. Only)

See Degree Regulations for the Honours Degree of Bachelor of Science. A student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3001, 3100, 3132, 3161, 3202, 3210, 4160, 4180, 4190, 419A/ B.
2. At least one of Mathematics 4162 or 4170
3. Statistics 2410 or 3410 .
4. Nine further credit hours in courses numbered 3000 or higher that are offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330, at least 3 of which must be in courses numbered 4000 or higher.
5. A computing course early in the program is required. Computer Science 1510 is recommended.
6. Physics 1050 (or 1020), 1051, 2820, 3220.

### 11.8.8 Honours in Pure Mathematics

See Degree Regulations for the Honours Degree of Bachelor of Science or Bachelor of Arts (Honours) Degree Regulations (as appropriate). A student shall complete the following requirements:

1. Mathematics $1000,1001,2000,2050,2051,2130,2260,2320,3000,3001,3202,3210,3300,3320,3331,4300,4310,439 \mathrm{~A} / \mathrm{B}$, Statistics 2410 or 3410.
2. Either Mathematics 3340 or 3370 .
3. Either Mathematics 4000 or 4001 .
4. Either Mathematics 4320 or 4321.
5. Twelve further credit hours in Pure Mathematics courses numbered 3000 or higher, excluding the former Mathematics 3330 , at least 9 credit hours of which must be in courses numbered 4000 or higher.
A computing course early in the program is required. Computer Science 1510 is recommended.

### 11.8.9 Honours in Statistics

See Degree Regulations for the Honours Degree of Bachelor of Science or Bachelor of Arts (Honours) Degree Regulations (as appropriate). A student shall complete the following requirements:

1. Mathematics $1000,1001,2000,2050,2051,2320,3000,3001,3132,3202,3210$, Statistics 2410 or $3410,2560,3411,3520,3521$, 4410, 4530, 4590, 459A/B.
2. Statistics 2500 or 2550 . Statistics 2550 is recommended.
3. Eighteen further credit hours in Statistics courses including at least 12 credit hours in courses numbered 4000 or higher excluding Statistics 4581
4. A computing course. Computer Science 1510 is recommended.
5. Mathematics 4000 is recommended.

### 11.8.10 Minor in Mathematics

A total of 24 credit hours in courses offered by the Department of Mathematics and Statistics is required of which only 6 credit hours shall be in courses at the 1000 level and at least 6 credit hours shall be in courses numbered 3000 or higher.

### 11.8.11 Minor in Statistics

The courses required for a minor in Statistics are:

1. Mathematics 1000,1001 ; Statistics 1510 or 2500 or 2550 , Statistics 2501 or 2560.
2. Twelve further credit hours in Statistics courses numbered 3000 or higher excluding Statistics 4581.

It is recommended that Mathematics 2000 and Mathematics 2050 be taken since they are prerequisite to several further Statistics courses.

### 11.9 Ocean Sciences

## www.mun.ca/osc

The Department of Ocean Sciences is the newest Department within the Faculty of Science. It was created in 2012, from the transition of the Ocean Sciences Centre, a research unit and facility that was first opened in 1967. The Department's mandate as an interdisciplinary unit is to focus on increasing our understanding of biological and chemical processes within the oceans, and how they relate to aquaculture and other applied marine fields.
The Department offers graduate programs in Marine Biology outlined under School of Graduate Studies.
The Department offers the following undergraduate programs:

1. Honours in Ocean Sciences
2. Joint Major or Joint Honours in Marine Biology
3. Major in Ocean Sciences
4. Major in Ocean Sciences (Environmental Systems)
5. Minor in Oceanography
6. Minor in Sustainable Aquaculture and Fisheries Ecology

Details of the Joint programs can be found under Joint Program Regulations.
Ocean Sciences course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Ocean Sciences

### 11.9.1 Minor in Oceanography

Students who take a Minor in Oceanography will complete 24 credit hours as follows:

1. Ocean Sciences $1000,2100,2200,2300$
2. Ocean Sciences 2000 or Biology 3710;
3. Earth Sciences 1000; and
4. Six credit hours that can be selected from:
a. Biology $3014,3709,3711,3712,3714,3715,4122,4601,4710,4750,4810$;
b. Chemistry $2100,3140,4151,4156$;
c. Earth Sciences 4302,4420 ;
d. Geography 3120, $3510,4190,4300$
e. Environmental Science $3072,3210,3211,4230$,
f. Ocean Sciences 2001, 3000, 3002, 3600, 4000, 4122, 4300, 4601;
g. Physics and Physical Oceanography 3300, 3340, 4300, 4340; and
h. Other applicable ocean-related courses as approved by the Head of the Department (or delegate).

Course prerequisites stipulated In the Course Descriptions section shall apply to the Minor in Oceanography.

### 11.9.2 Minor in Süstainable Aquaculture and Fisheries Ecology

Students who take a Minor in Sustainable Aquaculture and Fisheries Ecology will complete 24 credit hours as follows:

1. Ocean Sciences $1000,2001,3000,3002,4300$;
2. six credit hours selected from: Ocean Sciences 2000 (or Biology 3710), 3600, 3640, 4000, 4100, 4122, 4200, 4601, or other applicable courses as approved by the Head of the Department or delegate;
3. three credit hours selected from:
a. Biology 2122, 3401, 3640, 3715, 4251, 4605, 4750;
b. Biochemistry $3107,3402,4002,4101,4104,4105,4200,4201$;
c. Geography 4300.

Course prerequisites stipulated in the Course Descriptions shall apply to the Minor in Sustainable Aquaculture and Fisheries Ecology.

### 11.9.3 Major in Ocean Sciences and Major in Ocean Sciences (Environmental Systems)

1. The Major in Ocean Sciences is an interdisciplinary program that provides a solid foundation in ocean studies, including the basic principles of its main sub-disciplines (physical, chemical, geological, and biological oceanography).
2. The Major in Ocean Sciences (Environmental Systems) is a stream of the major that provides a geological/geographical context to biological and chemical phenomena in ocean sciences, and covers such key ocean-related topics as climate change and natural hazards.
3. Students wishing to take one of these major programs are encouraged to carefully consult the Degree Regulations for the General

Degree of Bachelor of Science.
4. More information, including on how to declare a Major in Ocean Sciences, the recommended courses and time tables, can be found in the Handbook of Undergraduate Studies in Ocean Sciences.

### 11.9.3.1 Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems)

Admission to the Ocean Sciences Major Programs is based on academic standing. To be considered for admission, students must normally have completed 30 credit hours with a minimum of 24 credit hours in Science, and an overall average of at least $65 \%$. It is recommended that the following courses be completed before admission:

1. Biology 1001 and 1002;
2. Chemistry 1050 and 1051 (or 1200 and 1001);
3. Earth Sciences 1000;
4. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
5. Mathematics 1000 (or equivalent);
6. Ocean Sciences 1000 with a minimum grade of $65 \%$; and
7. Physics 1020 or (1050) or 3 credit hours in Ocean Sciences courses at the 2000 level.

Students are advised to consult with the Department at the earliest opportunity to prepare adequately for program admission. Each student majoring in Ocean Sciences will be assigned an advisor who should be consulted on academic issues, including course selection.

### 11.9.3.2 Program Regulations for the Major in Ocean Sciences

Students must successfully complete:

1. the 30 specified credit hours required under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems);
2. Statistics 2550 (or equivalent);
3. Physics 1021 or 1051 ;
4. a minimum of 30 credit hours in Ocean Sciences, including:
a. Ocean Sciences 2000 (or Biology 3710), 2001, 2100 and 2500. Ocean Sciences 1000, completed under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems), will count as 3 of the required 30 credit hours in Ocean Sciences;
b. at least one of Ocean Sciences 2200 or 2300 ; and
c. at least 9 credit hours in Ocean Sciences courses at the 3000 and/or 4000 level. Choices include but are not limited to Ocean Sciences 3000, 3002, 3600, 3640, 4000, 4100, 4122, 4200, 4300, 4601;
5. extra Science courses as necessary to fulfil the minimum requirement for 78 credit hours in Science as stipulated under Electives of the Degree Regulations for the General Degree of Bachelor of Science. The program should include a minimum of 15 credit hours in Science courses at the 3000 and/or 4000 level; and
6. elective courses as necessary to make up the total of 120 credit hours.

### 11.9.3.3 Program Regulations for the Major in Ocean Sciences (Environmental Systems)

Students must successfully complete:

1. the 30 credit hours required under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems);
2. Statistics 2550 (or equivalent);
3. Physics 1021 or 1051 ;
4. Geography 1050, and at least two of Geography 2102, 2195, or 2425;
5. Earth Sciences 1002, 2502;
6. at least 9 credit hours at the 3000 and/or 4000 level chosen from:
a. Geography $3120,3140,3250,3425,3510,3905$, the former 3907, 4250, 4908, 4917; and
b. Earth Sciences 3600, 4605, 4903
7. a minimum of 30 credit hours in Ocean Sciences, including:
a. Ocean Sciences 2000 (or Biology 3710), 2001, 2100 and 2500. Ocean Sciences 1000, completed under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems), will count as 3 of the required 30 credit hours in Ocean Sciences;
b. at least 9 credit hours in Ocean Sciences courses at the 3000 and/or 4000 level. Choices include but are not limited to Ocean Sciences $3000,3002,3600,3640,4000,4100,4122,4200,4300,4601$; and
8. elective courses as necessary to make up the total of 120 credit hours.

### 11.9.4 Honours in Ocean Sciences

1. The Honours in Ocean Sciences is an interdisciplinary program that provides a solid foundation in ocean studies, including the basic principles of its main sub-disciplines (physical, chemical, geological, and biological oceanography). Possession of this degree will be of great advantage to students planning advanced work or graduate studies in a marine science field.
2. The Honours in Ocean Sciences requires a minimum of 45 credit hours in Ocean Sciences as outlined below. The program includes a prescribed number of courses at the 3000/4000 level as well as mandatory completion of Ocean Sciences 499A/B, which consist of supervised research leading to the submission and oral defence of a dissertation.
3. The Honours program may comprise a broad base of courses following the model of the generic Major in Ocean Sciences or be more specifically focused, in line with the stream in Environmental Systems. Upon admission, the student's Honours program will be defined in consultation with the student's supervisor, and approved by the Head of the Department (or delegate) in accordance with the Degree Regulations for the Honours Degree of Bachelor of Science.
4. Students considering this program are strongly encouraged to carefully consult the Degree Regulations for the General Degree of Bachelor of Science.
5. In addition to the information below, further information, including the admission process, program requirements, the recommended courses, and time tables, can be found in the Handbook of Undergraduate Studies in Ocean Sciences.

### 11.9.4.1 Admission Requirements for the Honours in Ocean Sciences

1. Admission to the Ocean Sciences Honours Program is based on academic standing. Students should be enrolled in one of the Major programs offered by the Department of Ocean Sciences before applying to the Honours, normally upon completing the third year of their program. For admission to the Honours program, students shall, at a minimum, have completed all admission requirements for their Major program.
2. Students should plan well in advance to ensure they have completed all the appropriate prerequisites. Entry to required courses may be limited and determined by academic performance. Students are advised to consult with the Department at the earliest opportunity to prepare adequately for program admission. Each student registered in the Honours will be assigned an advisor who should be consulted on academic issues, including course selection.

### 11.9.4.2 Program Regulations for the Honours in Ocean Sciences

Students must successfully complete:

1. the 30 credit hours required under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems);
2. Chemistry 2400 (or equivalent). Chemistry 2440 will be accepted as a substitute for Chemistry 2400 . However, a number of advanced Science courses may require Chemistry 2400 and 2401. Students are therefore strongly encouraged to complete the Chemistry 2400/2401 sequence or otherwise carefully plan their options;
3. Physics 1021 or 1051;
4. Statistics 2550 (or equivalent);
5. a minimum of 12 credit hours chosen from:
a. Biology 2060, 2122, 2250, 2600, 2900;
b. Biochemistry 2100,2201 or the former 2101, 3206 or 3106,3207 or 3107,3108 ;
6. a minimum of 45 credit hours in Ocean Sciences, including:
a. Ocean Sciences 2000 (or Biology 3710), 2001, 2100, 2200, 2300 and 2500 . Ocean Sciences 1000, completed under Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems), will count as 3 of the required 45 credit hours in Ocean Sciences;
b. at least 18 credit hours in Ocean Sciences courses at the 3000 and/or 4000 level. Choices include but are not limited to Ocean Sciences 3000, 3002, 3600, 3640, 4000, 4100, 4122, 4200, 4300, 4601;
c. Ocean Sciences 499A/B; and
7. elective courses as necessary to make up the total of 120 credit hours including a minimum of 15 credit hours at the 3000 and/or 4000 level in any of Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Geography, or Physics (these 15 credit hours can include courses completed as part of the requirements in 5.b. above).
Those courses in which a grade " B " or an average of $75 \%$ or higher are required to graduate with an Honours degree as per clause 1. of
Academic Standing in the Degree Regulations for the Honours Degree of Bachelor of Science, are the 42 credit hours in Ocean Sciences courses at the 2000, 3000 and/or 4000 level, and 15 credit hours in courses at the 3000 and/or 4000 level in any of Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Geography, or Physics.
Students should be aware of a number of creditrestrictions and refer to the Course Descriptions section for information.

### 11.9.4.3 Honours Dissertation

The dissertation is a crucial part of the program. It involves an original piece of research undertaken under the supervision of a faculty member of the Department of Ocean Sciences (or someone holding cross-appointment or adjunct status in the Department), as approved by the Head of the Department. This segment of the program is Ocean Sciences 499A/B, a two-semester, 6 credit hour linked course, where a grade of PAS in 499A is required in the first semester in order to proceed to 499B.
Work conducted during Ocean Sciences 499A/B includes directed reading relevant to the dissertation topic, preparation of a dissertation outline, supervised research, data analysis and interpretation, a written dissertation and an oral defence. Electronic copies of the dissertation, complete with figures and tables, are to be submitted to the student's supervisor and to the Head of the Department not less than two weeks before the end of lectures in the semester in which the student is registered for Ocean Sciences 499B.
The student will be examined orally on the contents of the dissertation, normally before the last day for examinations in the semester. The examining committee shall consist of the Head of the Department (or delegate), the student's supervisor, and an examiner appointed by the Head of the Department in consultation with the student's supervisor.

### 11.10 Physics and Physical Oceanography

## www.mun.ca/physics

The following undergraduate programs are available in the Department:

1. Applied Mathematics and Physics Joint Honours
2. Applied Mathematics and Physics Joint Major
3. Biochemistry and Physics Joint Honours
4. Chemistry and Physics Joint Honours
5. Computer Science and Physics Joint Honours
6. Computer Science and Physics Joint Major
7. Earth Sciences and Physics Joint Honours
8. Earth Sciences and Physics Joint Major
9. Geophysics and Physical Oceanography Joint Honours
10. Honours in Environmental Physics
11. Honours in Ocean Physics
12. Honours in Physics
13. Major in Environmental Physics
14. Major in Ocean Physics
15. Major in Physics
16. Minor in Applied Science - Electrical Engineering for Majors and Honours (see Faculty of Engineering and Applied Science)
17. Minor in Physics

Details of Joint Major and Joint Honours programs are given under Joint Program Regulations. Other joint programs may be arranged in consultation with the departments concerned.
Physics and Physical Oceanography course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Physics and Physical Oceanography.
Notes: 1. The attention of students intending to follow any one of the programs listed above is drawn to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate), governing the appropriate degree. Additional Departmental requirements are given below.
2. Faculty advisors are available to provide advice to students who are registered in, or who are considering registering in, any of the programs. Students are urged to consult with these advisors at their earliest opportunity in order to ensure that they select appropriate courses and programs. Students with credits in Physics courses which are not listed in this calendar should consult with the Department.
3. The six course stream consisting of Physics 1050, 1051, 2053, 2055, 2750, and 2820 or alternatively the seven course stream of Physics 1020, 1021, 1051, 2053, 2055, 2750, and 2820 is intended to provide a cohesive overview of Physics for potential Physics majors. Students who receive a grade of greater than 70\% in Physics 1020 may proceed directly into Physics 1051 without taking Physics 1021.
4. Physics 1050 is recommended for studehts who have completed Level II Physics, Level III Physics and Level III Advanced Mathematics. Mathematics 1000 must be taken at the same time as, or be completed prior to, taking Physics 1050. Students who have completed Mathematics 1000 and Physics 1050 are required to register for or complete Mathematics 1001 before registering for Physics 1051.
5. Physics 1020 is intended for students who have no background in Physics or who are pursuing degree programs which do not require Physics 1050. Students who complete Physics 1020 (with a grade of at least 70\%) and Mathematics 1000 are eligible for admission to Physics 1051. Students may receive credit for only one of Physics 1050 and 1020.
6. Students who have successfully completed Advanced Placement courses in both Physics and Mathematics will normally be eligible for direct entry into Physics 1051, which can be taken concurrently with Physics 2053 and 2750. Eligible students are advised to consult the Department.
7. Where circumstances warrant, any prerequisites listed below may be waived by the Head of the Department.

### 11.10.1 Minor in Physics

A minor in Physics will consist of 24 credit hours in Physics courses which must include Physics 1050 (or 1020), 1051, 2053, 2055, 2750, 2820. Only 6 credit hours at the 1000 level can be used to fulfill the 24 credit hours. For those students whose major is Chemistry or Biochemistry, the 24 credit hours in Physics will not include 2053.
For Computer Engineering and Electrical Engineering students, 24 credit hours in Physics which must include Physics 1050 (or 1020), 1051, 2750, and 3000, with an additional 12 credit hours selected from Physics 2820, 3600, 3750, 3751, 3800, 4000, 4220, 4600 or other 3000 or 4000 level courses subject to approval by the Head of the Department of Physics and Physical Oceanography and the Head of the Department of Electrical and Computer Engineering.

### 11.10.2 Major in Physics

As a component of the Degree Regulations for the General Degree of Bachelor of Science, a student shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 or (1200 and 1001).
3. Mathematics 1000 and 1001 .
4. Computer Science 1510 or 1001.
5. Mathematics 2000, 2050, 2260, and 3202.
6. Physics 1050 (or 1020) and 1051.
7. Physics 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3750, 3820 and 3900.
8. An additional 9 credit hours in physics courses numbered 3000 or higher which shall include at least 6 credit hours selected from the courses numbered 4000 or higher (excluding 490A/B).
9. Forty-two credit hours in applicable elective courses to form a total of 120 credit hours.

Mathematics 1001, 2000 and 2050 are prerequisites to many Physics courses and should be completed by the end of second year. Mathematics 2260 is co-requisite to Physics 3220 and is recommended to be completed before the Winter semester of the third year. Those who intend to make a career in Physics should note that additional Physics courses are strongly recommended and interested students should consult the academic program officer.

### 11.10.3 Honours in Physics

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, students shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or 1200 and 1001).
3. Mathematics 1000 and 1001.
4. Computer Science 1510 or 1001.
5. Mathematics 2000, 2050, 2260, 3202.
6. Physics 1050 (or 1020) and 1051.
7. Physics 2053, 2055, 2750, 2820, 3220, 3230, 3400, 3500, 3750, 3820, 3900, 4500, 4820, 4850, 490A/B.
8. Physics 3800 or 4900 .
9. An additional 12 credit hours in physics courses numbered 3000 or higher which shall include at least 6 credit hours selected from physics courses numbered 4000 or higher. Students are encouraged to consider Physics 3800, 4400 and 4900, and other courses depending on the focus of their thesis research.
10. Eighteen credit hours in applicable elective courses to form a total of 120 credit hours.

Note: Certain graduate courses may be taken in the final year of the Honours Program with the permission of the Head of the Department.
Only 6 credit hours at the 1000 level in each of Physics, Chemistry and Mathematics can be used to fulfil the 120 credit hours required for the Honours program. The inclusion of Mathematics 1090 (or 109A/B) or the sequence of Physics 1020, 1021, and 1051 will each increase the number of credit hours required for the Honours Physics program by three.
An Honours thesis is to be presented on work undertaken by the candidate under the guidance of a Department of Physics and Physical Oceanography faculty member. The thesis comprises the 6 credit hour course Physics 490A/B. Students should seek departmental advice regarding a thesis project no later than the winter preceding the semester in which the project will be started.
For specific courses and recommendations about electives, consultation with a faculty advisor in the Department is suggested.

### 11.10.4 Major in Environmental Physics

As a component of the Degree Regulations for the General Degree of Bachelor of Science, students shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or Chemistry 1010, the former 1011, and the former 1031)
3. Mathematics 1000 and 1001
4. Mathematics 2000, 2050, 2260, 3202
5. Physics 1050 (or 1020) and 1051
6. Physics 2053, 2055, 2300, 2820, 3220, 3300, 3340, 3820 (or Earth Sciences 3179), 3900
7. Earth Sciences $1000,1002,2502,3600$
8. Geography $2102,2195,3120$
9. Biology 2120,2600
10. Plus 30 additional credit hours from elective courses for a total of 120 credit hours.

The Major degree offers students a fair degree of latitude in choosing electives, students are encouraged to take Physics 2750 as well as electives from Geography and Earth Sciences: of particular merit would be any of Earth Sciences 3611, 3170, 3172 or 4105.

### 11.10.5 Honours in Environmental Physics

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, students shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses
2. Chemistry 1050 and 1051 (or Chemistry 1010 , the former 1011, and the former 1031)
3. Mathematics 1000 and 1001
4. Mathematics $2000,2050,2260,3202$
5. Physics 1050 (or 1020) and 1051
6. Physics 2053, 2055, 2300, 2820, 3220, 3300, 3340, 3820 (or Earth Sciences 3179), 3900, 4205, 4300, 4340, 490A/B
7. Earth Seiences $1000,1002,2502,3600$
8. Geography $2102,2195,3120$
9. Biology 2120, 2600
10. Plus 15 additional credit hours from elective courses for a total of 120 credit hours.

Students are encouraged to take Physics 2750 as well as electives from Geography and Earth Sciences: of particular merit would be any of Earth Sciences 3611, 3170, 3172 or 4105.

### 11.10.6 Major in Ocean Physics

As a component of the Degree Regulations for the General Degree of Bachelor of Science, students shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001).
3. Mathematics 1000 and 1001.
4. Computer Science 1510 or 1001.
5. Mathematics 2000, 2050, 2260, and 3202.
6. Physics 1050 (or 1020) and 1051.
7. One of Ocean Sciences 2000, 2100, or 2200.
8. Ocean Sciences 2300 or Physics 2300.
9. Physics 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3820, and 3900.
10. Physics 3300, 3340, and 4300.
11. An additional 3 credit hours in physics courses numbered 3000 or higher. Students are encouraged to consider Physics 3150,3750 , 3800, 4205, or 4340.
12. Thirty-six credit hours in applicable elective courses.

Mathematics 1001, 2000 and 2050 are prerequisites to many Physics courses and should be completed by the end of second year. Note that Mathematics 2260 is co-requisite to Physics 3220 and is recommended to be completed before the Winter term of the third year. Statistics 2550 is a recommended elective. Note that Ocean Sciences 1000 is a prerequisite for Ocean Sciences 2000 and Earth Sciences 1000 is a prerequisite for Ocean Sciences 2200 so that interested students need to consider this if they choose either of these options for clause 7 above.

### 11.10.7 Honours in Ocean Physics

As a component of the Degree Regulations for the Honours Degree of Bachelor of Science, students shall complete the following requirements:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001).
3. Mathematics 1000 and 1001.
4. Computer Science 1510 or 1001.
5. Mathematics 2000, 2050, 2260, and 3202.
6. One of Ocean Sciences 2000, 2100, or 2200.
7. Physics 1050 (or 1020) and 1051.
8. Physics 2053, 2055, 2750, 2820, 3220, 3230, 3400, 3500, 3750, 3800, 3820, 3900, 4820, and 490A/B.
9. Ocean Sciences 2300 or Physics 2300.
10. Physics 3300, 3340, 4205, 4300, and 4340.
11. Statistics 2550.
12. Twelve credit hours in applicable elective courses.

Certain of the graduate courses may be taken in the final year of the Honours Program with the permission of the Head of the Department.
Only 6 credit hours at the 1000 level in each of Physics, Chemistry and Mathematics can be used to fulfill the 120 credit hours required for the Honours program. The inclusion of Mathematics 1090, or the sequence of Physics 1020, 1021, and 1051, will each increase the number of credit hours required for the Honours Physics program by three.
Ocean Sciences 1000 is a prerequisite for Ocean Sciences 2000 and Earth Sciences 1000 is a prerequisite for Ocean Sciences 2200 so that interested students need to consider this if they choose either of these options for clause 6 above.
An Honours thesis is to be presented on work undertaken by the student under the guidance of a Department of Physics and Physical Oceanography faculty member. The thesis comprises the 6 credit hour course Physics 490A/B. Students should see departmental advice regarding a thesis project no later than the winter preceding the semester in which the project will be started.
For specific courses and recommendations about electives, consultation with a faculty advisor in the Department is suggested.
Credit Restrictions for Present Physics Courses with Former Courses Table
Credit May Be Obtained For Only One Course From Each of The Pairs of Courses Listed in This Table

| Present Course | Former Course | Present Course | Former Course |
| :--- | :--- | :--- | :--- |
| 1020 | 1200 | 1051 | 2050 |
| 1021 | 1201 | 1051 | 1061 |
| 1051 | 1052 | 3750 | 3700 |
| 2820 | 2200 | 3750 | 3850 |
| 2053 | 2450 | $490 \mathrm{~A} / \mathrm{B}$ | 4990 |
| 2055 | 2550 | 1051 | 2054 |
| 2750 | 2700 | 1051 | 2550 |
| 3220 | 3200 | 4400 | 3410 |
| 3230 | 2210 | 4900 | 3821 |

Physics 1021 and the former Physics 1201 will be considered equivalent for prerequisite purposes. Physics 1051 and 2820 will be considered equivalent to the former Physics 1054 and 2054 for prerequisite purposes. Physics 1051 and the former Physics 1052 and 2050 will be considered equivalent for prerequisite purposes.
Not all courses are offered every year. Students should check with the Department prior to registration to plan programs.

### 11.11 Psychology

## www.mun.ca/psychology

The following undergraduate programs are available in the Department.

1. Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
2. Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
3. Biology and Psychology (Behavioural Neuroscience) Joint Honours (B.Sc. only)
4. Biology and Psychology Joint Honours (B.Sc. only)
5. Major and Honours in Behavioural Neuroscience (B.Sc. only)
6. Major and Honours in Behavioural Neuroscience (Co-operative) (B.Sc. only)
7. Major and Honours in Psychology (B.A. or B.Sc.)
8. Major and Honours in Psychology (Co-operative) (B.A. or B.Sc.)
9. Minor in Psychology (B.A. or B.Sc.)

Details of Joint Honours programs are given under Joint Program Regulations.
Psychology course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Psychology.

### 11.11.1 Admission to Major Programs

Admission to the Major programs in the Department of Psychology is competitive and selective. Students who wish to enter these programs must submit a completed application form to the Psychology Department by June 1 for Fall semester registration. To be eligible for admission, students must have completed the 24 credit hours as listed below with an average of at least $65 \%$ in Psychology 1000/1001 and an overall average of at least $60 \%$ in Psychology, Critical Reading and Writing, and Mathematics:

1. Psychology 1000, 1001.
2. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
3. Mathematics 1000 , or two of $1090,1050,1051$ (or equivalent).
4. Six credit hours of electives ( 9 if only Mathematics 1000 is completed).

Students who fulfil the eligibility requirements compete for a limited number of available spaces. Sêlection is based on academic performance, normally cumulative average and performance in recent courses.

### 11.11.2 Admission to Honours Programs

The Honours programs in the Department of Psychology are designed for students who would like to concentrate their studies or pursue graduate work. Students who wish to be admitted to these programs must submit an "Application for Admission to Honours Program Faculties of Humanities and Social Sciences or Science" to the Department of Psychology by June 1 for Fall semester registration. This form is available at www.mun.ca/regoff/Application-Honours-Program-07-18.pdf. To be eligible for admission, students must have completed Psychology 2910, 2911, 2520, and 2930 and obtained in these courses a grade of "B" or better, or an average of $75 \%$ or higher. Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance in the required courses. In special circumstances, students may be admitted to Honours Programs at times other than June.
Note: Students are advised to consult the Bachelor of Arts (Honours) Degree Regulations or Degree Regulations for the Honours Degree of Bachelor of Science, as appropriate.

### 11.11.3 Requirements for a Major in Psychology

Students completing this program cannot receive credit for Psychology 2920. Students who intend to pursue graduate studies should take courses leading to the Honours degree

1. Students may Major in Psychology as part of either a B.A. or a B.Sc. program, and should consult the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate. All Majors are required to complete a minimum of 42 credit hours of Psychology as listed below:
a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930.
b. Twelve credit hours in Psychology chosen from the following: 3050, 3100, the former PSYC 3250, 3251, 3350, 3450, 3620, 3650,3750 , or one of $3800,3810,3820,3830,3840$ or 3860.
c. Twelve credit hours of 4000 -level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
2. Psychology Majors following the B.Sc. program are also required to complete the following:
a. Mathematics 1000 (or equivalent).
b. Biology 1001 and 1002.
c. Either Chemistry 1010 and the former 1011 (or 1050 and 1051); OR Physics 1020 (or 1050) and 1021 (or 1051).

Note: First year students should think carefully about whether Chemistry or Physics best suits their future program needs. Students should examine the prerequisites for upper-level science courses and attempt to take them in their first year.
d. Six credit hours of laboratory courses at the 2000 level or above in one of Biology, Chemistry, or Physics.

Note: Biology/Psychology 3750 and 4701 and Biology 3053 cannot be used to satisfy the requirement of 6 laboratory credit hours at the 2000 level or above in either Biology, Chemistry, or Physics.
3. Psychology Majors following the B.A. program are also required to complete Mathematics 1000 or two of 1090, 1050, 1051 (or equivalent), and are encouraged to complete at least 6 credit hours in Biology.

### 11.11.4 Requirements for Honours in Psychology

Students completing this program cannot receive credit for Psychology 2920.

1. Honours students in Psychology should consult Degree Regulations for the Honours Degree of Bachelor of Science or Bachelor of Arts (Honours) Degree Regulations as appropriate. All Honours students are required to complete the 60 credit hours of Psychology as listed below:
a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930, 3900, 4910, 499A/B
b. Eighteen credit hours chosen from the alternatives listed in Clause 1. b. of the requirements for a Major in Psychology
c. Twelve credit hours of 4000-level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
2. Honours students must also complete the requirements listed in either Clause 2. or Clause 3., as applicable, of the requirements for a Major in Psychology.
3. Honours students will be required to submit in their graduating year, an undergraduate thesis (Psychology 499A/B) which demonstrates their competence in Experimental Psychology.

### 11.11.5 Requirements for a Major in Behavioural Neuroscience (B.Sc. Only)

Students completing this program cannot receive credit for Psychology 2920.
A program is offered in the Psychology Department to provide an education in Behavioural Neuroscience. Students planning to enroll in the program are advised to consult with the Head of the Department at the earliest opportunity because certain course choices may restrict later options. Students who intend to pursue graduate studies should take courses leading to the Honours degree.
As a component of the Degree Regulations for the General Degree of Bachelor of Science, the program for a Major in Behavioural Neuroscience shall include:

1. a. Psychology $1000,1001,2521,2910,2911,2930,3800,3820$, and one of $3810,3830,3840$, or 3860.
b. Three credit hours in Psychology chosen from the following: 3050, 3100, the former 3250, 3251, 3350, 3450, 3620, 3650, 3750.
c. Any research experience course and one of Psychology 4250, 4251, 4850 or 4851 ; or, any selected topics course and one of Psychology 4270 or 4870.
2. a. Mathematics 1000 (or equivalent) and 1001.
b. Chemistry 1050 and 1051 (or 1200 and 1001).
c. Physics 1020 (or 1050) and 1021 (or 1051).
d. Biology 1001 and 1002.
e. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
3. Eighteen credit hours from the following courses chosen from at least two different sciences:
a. Biochemistry: Any 2000-, 3000-, or 4000-level course except the former 2000, 2005, the former 2010, the former 2011, 3202, 3402, or 4502.
b. Biology: Any 2000-, 3000-, or 4000-level course except 2040, 2041, 2120, 3053, or 3820.
c. Chemistry: 2100, 2210, 2301 (or the former Chemistry 2300), 2400, 2401, or any 3000 or 4000 level course.
d. Computer Science: Any 2000, 3000, or 4000 level course except the former 2650 and the former 2801.
e. Ocean Sciences: any 2000-, 3000-, or 4000-level course.
f. Mathematics: 2000, 2050, 2051, 3000, 3001 or any 3000 or 4000 level pure or applied mathematics course.
g. Medicine 310A/B.
h. Physics: Any 2000, 3000, or 4000 level course except 2151, 3150, 3151.

Notes: 1. Credit may not be obtained for both Biology 3750 and Psychology 3750 or for both Biology 4701 and Psychology 4701.
2. The courses listed under Clause 3 may have prerequisites. It is the student's responsibility to ensure that all prerequisites have been met, or that waivers have been obtained, before registering for these courses.

### 11.11.6 Requirements for Honours in Behavioural Neuroscience (B.Sc. Only)

Students in Behavioural Neuroscience should consult Degree Regulations for the Honours Degree of Bachelor of Science. Students completing this program cannot receive credit for Psychology 2920.

1. Honours students in Behavioural Neuroscience are required to complete the following Psychology courses:
a. Psychology 1000, 1001, 2521, 2910, 2911, 2930, 3800, 3820, one of the former 3250, 3810, 3830, 3840, or 3860, 3900, 499A/B
b. One further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750;
c. Any research experience course and one of Psychology 4850, 4851; 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
2. Honours students in Behavioural Neuroscience must also complete the requirements listed in Clauses 2. and 3. of the requirements for a Major in Behavioural Neuroscience.
3. In accordance with Academic Standing under the Degree Regulations for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of " B " or better, or an average of $75 \%$ or higher in all the required courses listed in Clauses 1 . and 3 . of the requirements for a major in Behavioural Neuroscience and Clause 1 of the requirements for honours in Behavioural Neuroscience, except those at the 1000 level.

### 11.11.7 Requirements for a Minor in Psychology

Students who Minor in Psychology are required to complete a minimum of 24 credit hours of Psychology as follows:
a. Psychology 1000, 1001, and 2920 (or 2910 or 2925)
b. Fifteen other credit hours of Psychology.

### 11.11.8 Requirements for Major and Honours in Psychology (Co-operative) (B.A. or B.Sc.), and Major and Honours in Behavioural Neuroscience (Co-operative) (B.Sc. only)

## Psychology Co-op Program (PCOP)

The Psychology Co-op Program (PCOP) is available to full-time Psychology (B.A. and B.Sc.) and Behavioural Neuroscience Majors and Honours students only.
The PCOP provides an opportunity for students to learn valuable practical skills while working in fields related to Psychology. Students complete three Work Terms, which consist of full-time paid employment. The timing of the Work Terms is such that employers stand to gain from the acquired skills of psychology majors in training. The objectives of the Work Term component of the PCOP are embodied in

## the Work Term Descriptions.

### 11.11.8.1 Admission Requirements

1. Admission is limited, competitive, and selective.
2. The primary criteria used in reaching decisions on applications for admission are motivation and overall academic performance. Students may be required to participate in an interview as part of the selection process.
3. Students must first be admitted to the Psychology (B.A. or B.Sc.) or Behavioural Neuroscience Major.
4. To be eligible for admission, students must have completed a minimum of 30 credit hours with an overall average of at least $65 \%$, and an average of at least $65 \%$ in all Psychology courses. Students must have a passing grade in all required courses, and must have full-time status in the semester in which they apply.
5. Applications are accepted in the Fall semester only; students should consult the Department for the specific application deadline.

### 11.11.8.2 Program of Study

1. In addition to the requirements below students must fulfill all requirements for either a Major in Psychology (B.A.), a Major in Psychology (B.Sc.), Major in Behavioural Neuroscience, Honours in Psychology (B.A.), Honours in Psychology (B.Sc.), or Honours in Behavioural Neuroscience. Courses in each program are normally taken in blocks as shown in the appropriate program table. Students should consult with a faculty advisor each semester regarding course selection.
2. Students' status in the program is assessed at the end of each semester. To remain in PCOP, students must receive a passing grade in all required courses, and must maintain an average of at least $65 \%$ in all Psychology courses and a cumulative average of at least $65 \%$. A student who fails a required course, fails to maintain an average of $65 \%$ in Psychology courses, or fails to maintain a cumulative average of $65 \%$, will be required to withdraw from PCOP. The student in question may apply for readmission in a subsequent year after passing the specified required course(s) previously failed, or re-establishing the required average.
3. Students are required to complete three work terms.

### 11.11.8.3 Work Term Placement

1. General management of the PCOP is the responsibility of the designated Academic Staff Member in Co-operative Education (ASMCE). ASM-CEs are responsible for facilitating the engagement of potential employers in the program, organizing competitions for Work Term employment, arranging job interviews, managing the co-operative education program database, developing employment opportunities and monitoring students during the work term. The ASM-CEs work with the Department to counsel students, visit students on their work assignments and evaluate the work term.
2. Students are ultimately responsible for securing their work term placements. ASM-CEs provide support for the job search and inform students of potential opportunities.
3. A student in the co-operative education program gives permission to the University to provide a copy of the applicant's resume, university transcript and work term evaluations to potential employers
4. A student who is enrolled in a co-operative education program may independently obtain a work term placement in consultation with the ASM-CE. Such employment positions must satisfy the criteria for work terms, be confirmed in writing by the employer and be approved by the ASM-CE before the first day of the work term according to the University Diary.
5. Work terms are normally 12 weeks in duration, full-time and paid. Remuneration for work placements is determined by employers based on their internal wage structures. The start and end dates for the work term are shown in the University Diary.

### 11.11.8.4 Registration and Evaluation of Performance

1. In Work Terms I, II, and III, students must register for Psychology 199W, 299W, and 399W respectively.
2. Student performance evaluations are to be completed by the employer in conjunction with the student and returned to the ASM-CE. The Work Term evaluations shall consist of at least two components:
a. On-the-job Student Performance: assessed by the ASM-CE using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought. Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, EXCEEDS EXPECTATIONS, SATISFACTORY, OR FAIL
b. Work Term Assignment(s)
i. Students are required to submit Work Term assignments as outlined in the course syllabus.
ii. Work Term assignments are evaluated by the ASM-CE.

Evaluation of the work term assignment(s) will result in one of the following classifications: OUTSTANDING, EXCEEDS EXPECTATIONS, SATISFACTORY, OR FAIL.
The evaluation of the job performance and the work term assignments are recorded separately on the transcript. Overall evaluation of the work term will result in one of the following final grades being awarded:

- Pass with Distinction: Indicates OUTSTANDING PERFORMANCE in both the work term assignment(s) and the job performance.
- Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work term assignment(s) and the job performance.
- Fail: Indicates FAILING PERFORMANCE in the work term assignment(s) or the job performance, or both.

To remain in PCOP, a student must obtain a final grade of PAS.
3. If a student fails to achieve the Work Term standards specified above, the student will be required to withdraw from PCOP. Such a student may reapply to the program, at which time the student will be required to repeat the Work Term with satisfactory performance. Only one Work Term may be repeated in the entire program.
4. In order to be considered for readmission, students must formally apply for readmission to the program not later than the deadline date specified in Admission Requirements.
5. A student who withdraws from a Work Term without acceptable cause subsequent to a job placement will be required to withdraw permanently from PCOP.
6. Students who drop a Work Term without prior approval from both ASM-CE and the Head of the Department of Psychology, or who fail to honour an agreement to work with an employer, or conduct themselves in such a manner as to cause their discharge from the job, will be awarded an overall grade of FAL for the Work Term in question and will be required to withdraw permanently from PCOP.
7. Permission to drop a Work Term does not constitute a waiver of degree requirements, and students who have obtained such
permission must complete an approved Work Term in lieu of the one dropped.

### 11.11.9 Suggested Course Sequences

The tables below show suggested course sequences for the B.A. in Psychology (Co-operative), the B.Sc. in Psychology (Cooperative), the B.A. Honours in Psychology (Co-operative), the B.Sc. Honours in Psychology (Co-operative), the B.Sc. in Behavioural Neuroscience (Co-operative), and the B.Sc. Honours in Behavioural Neuroscience (Co-operative).
Course patterns may vary. Students are encouraged to meet with the undergraduate coordinator early in their program in order to establish a course pattern that meets the requirements as set out in these regulations.

Table 1 Suggested Course Sequence for B.A. in Psychology (Co-operative)

| Term | Suggested Courses |
| :--- | :--- |
| Fall |  |
| Semester 1 | Critical Reading and Writing requirement <br> Elective or Humanities and Social Sciences requirement <br> Elective or Humanities and Social Sciences requirement <br> Mathematics 1000 or one of Mathematics 1090, 1050, 1051 <br> Psychology 1000 |
| Winter <br> Semester 2 | Critical Reading and Writing requirement <br> Elective or Humanities and Social Sciences requirement <br> Elective or Humanities and Social Sciences requirement <br> One of Mathematics 100, 1090, 1050 or 1051 (Psyehology Majors are required to <br> complete Mathematics 1000 or two of 1090, 1050, 1051 (orequivalent). An Elective or or <br> Humanities and Social Sciences requirement can be taken if Mathematics 1000 was <br> taken in Semester 1.) |
| Psychology 1001 |  |

Table 2 Suggested Course Sequence for B.Sc. in Psychology (Co-operative)


Table 3 Suggested Course Sequence for B.A. (Honours) in Psychology (Co-operative)

| Term | Suggested Courses |
| :--- | :--- |
| Fall |  |
| Semester 1 | Critical Reading and Writing requirement <br> Elective or Humanities and Social Sciences requirement <br> Elective or Humanities and Social Sciences requirement <br> Mathematics 1000 or one of Mathematics 1090, 1050, 1051 <br> Psychology 1000 |
| Winter <br> Semester 2 | Critical Reading and Writing requirement <br> Elective or Humanities and Social Sciences requirement <br> Elective or Humanities and Social Sciences requirement <br> One of Mathematics 1000, 1090, 1050 or 1051 (Psychology Majors are required to <br> complete Mathematics 1000 or two of 1090, 1050, 1051 (or equivalent). An Elective or <br> Humanities and Social Sciences requirement can be taken if Mathematics 1000 was <br> taken in Semester 1.) |
| Psychology 1001 |  |

Table 4 Suggested Course Sequence for B.Sc. (Honours) in Psychology (Co-operative)


Table 5 Suggested Course Sequence for B.Sc. in Behavioural Neuroscience (Co-operative)

| Term |
| :---: |
| Fall <br> Semester 1 |
| Winter Semester 2 |
| Fall <br> Semester 3 |
| Winter Semester 4 |
| Spring <br> Work Term 1 |
| Fall <br> Semester 5 |
| Winter Semester 6 |
| Spring <br> Work Term 2 |
| Fall Semester 7 |
| Winter Work Term 3 |
| Fall <br> Semester 8 |

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Table 6 Suggested Course Sequence for B.Sc. (Honours) in Behavioural Neuroscience (Co-operative)

| Term | Suggested Courses |
| :---: | :---: |
| Fall Semester 1 | Biology 1001 or Physics 1020 (or 1050) (Students registered in Physics 1050 must also be registered in Mathematics 1000 (not 1090)). <br> Chemistry 1050 (or 1200) <br> Critical Reading and Writing requirement <br> Mathematics 1090 or 1000 <br> Psychology 1000 |
| Winter Semester 2 | Biology 1002 or Physics 1021 (or 1051) Chemistry 1051 (or 1001) <br> Critical Reading and Writing requirement Mathematics 1000 or 1001 Psychology 1001 |
| Fall Semester 3 | BHNR Requirement 1 (BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Elective or Science requirement <br> Physics 1020 (or 1050) or Biology 1001 (Students registered in Physics 1050 must also be registered in Mathematics 1000 (not 1090)). <br> Psychology 2521 or 2930 <br> Psychology 2910 |
| Winter Semester 4 | BHNR Requirement 2 (BHNR Requirement $1-6$ specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Mathematics 1001 or Elective or Science requirement <br> Physics 1021 (or 1051) or Biology 1002 <br> Psychology 2911 <br> Psychology 2930 or 2521 |
| Spring Work Term 1 | Psychology 199W |
| Fall Semester 5 | BHNR Requirement 3 (BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Elective or Science requirement <br> Psychology 3810, 3830, 3840, or 3860 <br> Psychology 3800 <br> Psychology 3900 |
| Winter Semester 6 | BHNR Requirement 4 (BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Elective or Science requirement <br> Elective or Science requirement <br> Psychology 3000-level core <br> Psychology 3820 |
| Spring Work Term 2 | Psychology 299W |
| Fall Semester 7 | BHNR Requirement 5 (BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Elective or Science requirement <br> Elective or Science requirement <br> Psychology Research Experience course <br> Psychology 499A |
| Winter Work Term | Psychology 399W |
| Spring (Opt | Psychology 499A |
| Fall <br> Semester 8 | BHNR Requirement 6 (BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only). <br> Elective or Science requirement <br> Elective or Science requirement <br> Psychology Selected Topics course <br> Psychology 499B |

program students should consult with the Faculty of Nursing concerning
admission to this course.
CR: the former BIOC 2430
LC: 4
PR: Level 3 Chemistry or Chemistry 1010 or Chemistry 1810 or equivalent, and acceptance to Bachelor of Nursing (Collaborative)
UL: may not be used for credit to fulfil the requirements for a major in the Department of Biochemistry

2005 Food, Food Safety, and Health introduces the concepts of the composition of foods, and how the processing of food affects sensory appeal, shelf life and nutrient composition. Common food and water-borne illnesses (risks and prevention) are covered in the course content. Students will also be introduced to food biotechnologies, including genetically modified organisms, nutraceuticals and the development of functional foods.

2100 Introduction to Molecular Biology and Genetics will cover the heritability of simple traits from phenotype to genotype; the discovery of DNA as the molecule of heredity; the structure and function of DNA; the elucidation of the genetic code; and the manipulation of DNA for recombinant DNA technology and biotechnology.
CO: the former BIOC 2101, Chemistry 2401, Physics 1021 or 1051.
Students may replace the co-requisite Chemistry 2401 with Chemistry 2440 as a prerequisite. Chemistry 2440 may not be taken as a corequisite of 2100 .
CR: BIOC 2200, Biology 2250
LH: up to four hours on alternate weeks which will normally consist of one three hour laboratory period plus one additional hour on the following day
PR: the former BIOC 2101, Chemistry 2401, Physics 1021 or 1051, Science 1807 and Science 1808. Students may replace the corequisite Chemistry 2401 with Chemistry 2440 as a prerequisite. Chemistry 2440 may not be taken as a co-requisite of 2100.
2200 Introduction to Molecular Biology and Genetics will cover the heritability of simple traits from phenotype to genotype; the discovery of DNA as the molecule of heredity; the structure and function of DNA; the manipulation of DNA for recombinant DNA technology and biotechnology; and briefly, pharmacogenetics. Biology students should normally take Biology 2250 in the Fall semester, and Biochemistry and Biochemistry (Nutrition) students should normally take BIOC 2200 in Winter semester.
CO: Chemistry 2400
CR: BIOC 2100, Biology 2250
2201 Introduction to Biochemistry (same as the former BIOC 2101) is an introduction to the major organic substances of living organisms, proteins, carbohydrates and lipids: their structure, analysis and biochemical function. Other topics include: enzymes; the biochemistry of membranes, including the plasma membrane and specialized intracellular membranes; and the biochemistry of selected differentiated cells.
CO: Physics 1021 or 1051
CR: the former BIOC 2101, Pharmacy 2004, or the former Pharmacy 3110 PR: Chemistry 2400 and Physics 1020 or 1050

2600 Introduction to Human Nutrition (same as Human Kinetics 2600) gives an overview of human nutrition with an emphasis on topics of current interest. Students will gain an understanding of nutrition in the context of health maintenance across the life span. Topics covered will include nutrition during pregnancy, nutrition for infants, Canadian Recommended Nutrient Intakes / Dietary Reference Intakes, weight loss and weight gain, nutriceuticals and ergogenic aids.
CR: Human Kinetics 2600 or the former Kinesiology 2600
2901 Biochemistry Laboratory develops robust basic biochemistry lab skills in the context of a biotechnology project; students purify and characterize a recombinantly expressed enzyme. Students learn skills including safety, pipetting, buffer calculations, making solutions, protein bioinformatics, techniques for protein enrichment, enzyme kinetics measurements and calculations, graphing data, keeping a lab book, teamwork, critical analysis and presentation of their work in several formats. Students may co-author a scientific publication based on their results.
AR: attendance is required in the laboratory component of this course
CO: Chemistry 2400
LH: 3
PR: Chemistry 1051, Science 1807 and Science 1808
3052 Food Microbiology (same as Biology 3052) is the study of the microbiology of water and food with regard to the beneficial and detrimental roles of microorganisms on interaction with these systems. Emphasis will be on the microbiology of food, fermentations, food spoilage and food borne vectors of human disease.
CR: Biology 3052, and the former BIOC 3054, BIOC 3401
LC: three hours per week
LH: three hours per week
PR: Biology 3050 and Science 1807 and Science 1808
3105 Physical Biochemistry examines topics such as: types of intermolecular forces in biomolecules; the folding of biomolecules and the role of water; pH , buffers, and ionisation of biomolecules; thermodynamics:
equilibria, coupled reactions, transport across membranes and redox reactions; and ligand binding. Other topics will include: size and shape of biomolecules; isotopes in biochemistry; and, spectroscopy of biomolecules.
OR: a two hour problem-solving class
PR: BIOC 2201 or the former 2101; and the former Chemistry 2300 or 2301 or Physics 2053

3106 Metabolism examines the catabolism of carbohydrates, lipids and amino acids. Other topics will be: mitochondria, chloroplasts and ATP synthesis; biosynthesis of carbohydrates and lipids; metabolic specialization of differentiated cells and tissues; and, integration of metabolism.
CR: BIOC 3206, the former BIOC 3102 or Pharmacy 3111
LH: one three-hour laboratory or one-hour tutorial per week
OR: one-hour tutorial or one three-hour laboratory per week
PR: BIOC 2201 or the former 2101, Science 1807 and Science 1808
3107 Nucleic Acid Biochemistry and Molecular Biology examines the structure, function and biochemistry of DNA and RNA and the biochemical processes in the flow of information from the gene to protein. These will include: DNA replication, recombination and repair processes; transcription of RNA and RNA splicing; and protein synthesis. The regulation of gene expression will also be covered at an introductory level. The course will also include an introduction to cloning methodology.
CR: BIOC 3207
LH: up to four hours per week which will normally consist of one three hour laboratory period plus one additional hour on the following day.
PR: BIOC 2201 or the former 2101; and one of BIOC 2100, 2200, o Biology 2250, Science 1807 and Science 1808
3108 Molecular Biochemistry of the Cell focuses on the molecular biochemistry of intracellular regulation, including advances in topics such as signal transduction, apoptosis and cancer. Other topics will include protein processing and sorting, cyclins, G-protein structure, function and regulation, cell adhesion molecules and the structure of the extracellular matrix.
PR: BIOC 2100 or 2200, or Biology 2250; and BIOC 2201 or the former 2101

## 311A/B Human Physiology-inactive course.

3202 Community Nutrition - inactive course.
3203 Fundamentals of Human Nutrition is the cornerstone course for the study of nutrition. The sources, uptake and physiologic roles of essential nutrients will be discussed in the context of growth, maintenance, reproduction and overall health in humans.
CO: BIOC 3106 or 3206
CR: the former BIOC 3201
PR: BIOC 2201 or the former 2101, 2600
3206 Metabolism examines the catabolism of carbohydrates, lipids and amino acids. Other topics will be: mitochondria, chloroplasts and ATP synthesis; biosynthesis of carbohydrates and lipids; metabolic specialization of differentiated cells and tissues; and, integration of metabolism.
CR: BIOC 3106, the former BIOC 3102 or Pharmacy 3111
PR: BIOC 2201 or the former 2101
3207 Nucleic Acid Biochemistry and Molecular Biology examines the structure, function and biochemistry of DNA and RNA and the biochemical processes in the flow of information from the gene to protein. These will include: DNA replication, recombination and repair processes; transcription of RNA and RNA splicing; and protein synthesis. The regulation of gene expression will also be covered at an introductory level. The course will also include an introduction to cloning methodology.
CR: BIOC 3107
PR: BIOC 2201 or the former 2101; and one of BIOC 2100, 2200, or Biology 2250
3402 Food Chemistry examines the following topics: water structure and the role of water in chemical reactions and mechanical properties of foods; chemistry and physical properties of carbohydrates, proteins and lipids; food dispersions; pigments and natural colorants; food flavour; enzyme properties and applications; vitamins and minerals; chemistry of enzymic and nonenzymic browning; characteristics of: muscle tissue, milk, eggs, bread and edible plant tissue; food additives; and, chemical changes in foods during processing.
LH: 3
PR: BIOC 2005; BIOC 2201 or the former 2101; Chemistry 2400, Science 1807 and Science 1808

3600 Sports and Exercise Nutrition deals with the specific roles of nutrients in sport and exercise, and the application of nutrition to sport and exercise.
CR: the former BIOC 4241
PR: BIOC 2600 or HKR 2600 or the former BIOC 3200/3201; and one of BIOC 311B, MED 310B, HKR 2320
3906 Nutritional Biochemistry and Metabolism Laboratory teaches advanced biochemical lab and critical thinking skills with a focus on metabolism and nutrition-related biochemistry. Topics may include animal diet formulation, tissue culture, immunoblots, metabolic flux assays,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
metabolic regulation, nutrient metabolism, metabolomics and metabolic energetics. Students develop their quantitative reasoning, teamwork, and written and oral communication skills. Students may have opportunities to tour lab facilities and to co-author a scientific publication based on their results.
AR: attendance is required in the laboratory component of this course
CO: BIOC 3106 or 3206
LH: 3
PR: BIOC 2901, Science 1807 and Science 1808
3907 Molecular Biology Laboratory develops biochemical lab and critical thinking skills through a molecular biology focused project. Topics may include restriction digestion, PCR amplification-based techniques, recombinant DNA and plasmid construction, gene expression systems, nucleic acid bioinformatics, and application of high through-put methods in molecular biology. Students develop their quantitative reasoning, teamwork and communication skills (written and oral). Students may have the opportunity to coauthor a peer-reviewed scientific publication based on their results.
AR: attendance is required in the laboratory component of this course
LH: 3
PR: BIOC 2901, Science 1807 and Science 1808, and one of BIOC 2100, 2200, Biology 2250
4002 Biochemical Regulation examines metabolic regulation at the cellular and multicellular level. Topics will include: control theory; hormones: their biosynthesis and mechanism of action; signal transduction; and, endocrine coordination of metabolic processes. Principles will be illustrated by the use of case studies from the medical and veterinary literature.
LC: two to three hours per week, together with assigned reading and case studies
PR: BIOC 2100 or 2200, or Biology 2250; BIOC 3106 or 3206
4101 Proteins will review the history of protein research and the general properties of proteins and include other topics such as: strategy and methods for purification; chemical structure, properties, modification and determination of the protein amino acids; sequencing strategy, chain cleavage methods and end group analysis; folding of the protein main chain and techniques to determine structure; and, the relationship between structure and function: protein filaments, motors and regulators. It will also cover disease-related proteins and other examples from the current literature.
LC: two to three hours per week, together with assigned reading
PR: BIOC 3105
4102 Current Topics in Biochemistry is a seminar course in which faculty and students will discuss topics of current interest in the biochemical literature. Students will be responsible for reading and critically assessing recent literature.
PR: Honours Biochemistry students in their final year or permission of the Head

4103 Prokaryotic Gene Regulation is a detailed and up-to-date treatment of the mechanisms of genetic regulation found in bacterial cells. The course will develop topics based on the evidence of bacterial genetics and modern molecular biological experiments. Topics may include: theory of mutations, RNA transcription, positive and negative regulation of transcription; regulation of protein synthesis; control of DNA replication; bacterial operons and regulons; developmental molecular biology in bacterial systems; and evolution and molecular biology of organelles.
PR: BIOC 3107 or 3207
4104 Eukaryotic Gene Regulation and Developmental Biology details the cellular and molecular aspects of eukaryotic gene regulation and development. Topics to be covered will include the DNA content and organization of eukaryotes, mechanisms controlling the expression of eukaryotic genetic information at the transcriptional and post-transcriptional levels, and the methodologies used to define these mechanisms. Detailed consideration will be given to the cell-surface events which regulate nuclear gene expression and cell lineage specification. Developmental mechanisms operating in a number of model systems will be discussed.
PR: BIOC 3107, 3108, or 3207
4105 Immunology (same as Biology 4200 and Pharmacy 3006 and the former Pharmacy 4105) is an introduction to the cells and organs of the innate and adaptive immune systems. The molecular and cellular basis of allergy, autoimmunity, vaccination and cancer immunology will also be discussed.
CR: Biology 4200, Pharmacy 3006, the former Pharmacy 3105, the former Pharmacy 4105
: BIOC 2201 or the former 2101
4200 Bioenergetics and Biological Oxidation examines topics such as: respiration and electron transport; the functional organization of energy transducing membranes; the structure and function of flavoenzymes, cytochromes, iron-sulfur proteins and quinones; enzyme reduction of oxygen; and, free radicals in biological systems.
LC: two to three hours per week and assigned reading
PR: BIOC 3106 or BIOC 3206

4201 Membranes - Structure and Function examines the structure of model and biological membranes, the molecular interactions between membrane components and the effects of these interactions on the biophysical and functional properties of membranes. Other topics will include the structure-function of specialized membranous systems, such as lipoprotein, lung surfactant, and lipid rafts; membrane lipid composition in biochemical adaptation and function; and the role of membrane proteins in intracellular trafficking, receptor function, enzymatic activity and membranerelated diseases.
PR: BIOC 3105
4210 Biochemical Research Techniques I examines the proteome and the genome. This course is designed to familiarize students with current methodology employed in the analyses of the complements of proteins and genes resident in eukaryotic cells. Emphasis will be placed on techniques that facilitate the simultaneous functional analyses of large numbers of proteins or genes. A variety of techniques, used in the study of expression and functional proteomics, will be described, including 2D PAGE, tagged proteins, fluorophores, mass spectrometry and protein microarrays. Techniques used in the study of gene expression and functional genomics will also be described, including the use of reporter gene constructs, analysis of protein-DNA interactions, expressions of cloned genes and several experimental approaches used to define the eukaryotic transcriptome.
AR: attendance is required
PR: BIOC 3105 or 3206 (or 3106 )
4211 Biochemical Research Techniques II introduces students to the primary literature of metabolism. It teaches them to critique, both orally and in writing, current research papers. By means of guest lecturers and field trips it introduces students to biochemical activities outside of the home department.
AR: attendance is required
PR: BIOC 3106 or 3206
4230 Lipid and Lipoprotein Metabolism is designed to provide current knowledge about advances and controversies in lipid and lipoprotein metabolism in the context of health and disease. Topics to be covered include advanced knowledge about lipid and lipoprotein synthesis and regulation, reverse cholesterol transport, plus lipid and lipoprotein utilization to regulate cellular and physiological functions. The covered topics will be related to areas such as reproductive biology, atherosclerosis, AIDS, Alzheimer's, and cancer.
CR: BIOC 6000
PR: One of BIOC 3106, 3206, Pharmacy 3111
4231-4239 Special Topics in Biochemistry will be given for senior undergraduates, and will cover a range of topics in specialized fields in Biochemistry. They may be taught by visiting specialists when available.
PR: to be determined at the time of offering
4240 Nutrigenetics and Nutrigenomics is designed to familiarize students with emerging discoveries in the area of diet-gene interaction and to further their understanding of the relationships between the genome and diet as well as the potential to design personalized diets for better health. Students will develop an appreciation for the role of nutrients in the prevention and/or development of disease.
PR: BIOC 2100 or Biology 2250; BIOC 3106 or BIOC 3206; and one of BIOC 3203 or the former BIOC 3200
4241-4249 Special Topics in Nutrition will be given for senior undergraduates, and will cover a range of topics in specialized fields in Nutrition. They may be taught by visiting specialists when available.
PR: to be determined at the time of offering
4300 Advanced Nutrition is a course in which current controversies and trends in human nutrition are presented and discussed using the scientific literature.
PR: BIOC 3203 or the former BIOC 3200/3201, and either BIOC 311B or Medicine 310B
4301 Nutrition and Disease is a course which addresses the scientific basis for nutritional intervention in chronic human disease.
PR: BIOC 3203 or the former BIOC 3200/3201, and either BIOC 311B or Medicine 310B
4502 Techniques in Nutrition Research is a seminar course in which faculty and students will discuss concepts and methods used in the study of nutrition. Students will be responsible for reading and critically assessing recent literature.
PR: BIOC 4301
PR: Honours Nutrition students in their final year or permission of the Head
499A and 499B Dissertation is the independent study of a problem in Biochemistry and is obligatory for Honours students in Biochemistry and Biochemistry(Nutrition). Faculty advisors will guide the subject of study which must be approved by the Head of the Department or delegate. The written dissertation shall be submitted by the end of the tenth week of the second semester. At the end of that semester the student will give an oral presentation and answer questions on their study.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

CH: 6
OR: Occasional classes will be held to guide and advise students in the preparation of their written reports. Students are expected to attend these classes.
PR: Honours students in their final year or permission of the Head; Science 1807 and Science 1808

### 12.2 Biology

According to the nature of particular courses, the specified number of laboratory hours may consist of some combination of laboratory work, seminars or directed independent study relevant to the practical aspects of the subject matter.
Biology courses are designated by BIOL.
1001 Principles of Biology is an introduction to the science of Biology, including a discussion of the unity, diversity and evolution of living organisms.
LH: 3
PR: Science 1807 and Science 1808
UL: credit may be obtained for only 6 1000-level credit hours in Biology
1002 Principles of Biology is an introduction to the science of Biology, including a discussion of the unity, diversity and evolution of living organisms.
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001
UL: credit may be obtained for only 6 1000-level credit hours in Biology
2010 Biology of Plants is a study of the structure, function and reproductive biology of plants, with emphasis on the vascular plants, and on their relationship to environment and human activities.
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001 and 1002; Chemistry 1050 (or 1200 or 1010 or the former 1000)

2040 Modern Biology and Human Society I examines various aspects of the human body, and the implications of modern biological research for human beings. Topics include cancer; diet and nutrition and associated diseases; circulatory disease, immunity, human genetics, biorhythms, new diseases, genetic engineering and reproductive engineering.
OR: seminars
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Biology

2041 Modern Biology and Human Society II examines the origins and consequences of the environmental crisis of the 20th century. Topics include the population explosion, energy, material cycles, air and water and land pollution, global food supplies, the fisheries, wildlands, renewable and nonrenewable resources, environmental ethics.
OR: seminars
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Biology

2060 Principles of Cell Biology is a modern view of the biology of eukaryotic cells, organelles and molecules and their interactions in the functioning of living organisms.
CO: Physics 1021 or 1051; Biochemistry 2201 or the former 2101
CR: the former BIOL 3060
LH: 3
PR: Physics 1021 or 1051 ; Biochemistry 2201 or the former 2101
PR: Science 1807 and Science 1808; BIOL 1001, 1002 and 2250; Chemistry 2400

2120 Biology for Students of Earth Sciences is an introduction of the principles of Biology for students in Earth Sciences. Topics will include principles of classification, levels of biological organization, fundamental
characteristics of living organisms and basic concepts in ecology.
CR: BIOL 1001 or 1002
LH: 3
PR: Science 1807 and Science 1808; Earth Science major; Earth Sciences 1001 or 1002 or permission of the Head of Department.
UL: may not be used for credit by Biology Majors or Minors
2122 Biology of Invertebrates is a study of the invertebrates with emphasis on structure and function, adaptations and life histories. The laboratories will present a broad survey of the major invertebrate groups.
CR: the former BIOL 3122
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001, 1002
2210 Biology of Vertebrates is a study of the vertebrates, with emphasis
on structure and function, adaptations and life histories.
CR: the former BIOL 3210
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001, 1002
2250 Principles of Genetics is an introduction to Mendelian and molecular
genetics. Phenotype and genotype, behaviour of alleles in genetic crosses, chromosome theory of inheritance, genetic linkage, molecular biology of DNA, RNA and protein, molecular basis of mutation, recombinant DNA, applications of genetic biotechnology.
CO: Chemistry 2400
CR: Biochemistry 2100, the former BIOL 3250
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001 and 1002; Chemistry 1050/1051 (or 1200 and 1001, or 1010 and the former 1011)
PR: Chemistry 2400
2600 Principles of Ecology is a conceptual course introducing the principles of ecology, including theoretical, functional and empirical approaches.
CR: the former BIOL 3600
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001 and 1002, or BIOL 2120 and admission to a major in Environmental Physics

2900 Principles of Evolution and Systematics is an introduction to the processes and patterns of evolution, and the principles of classification. Natural selection and other microevolutionary processes, variation and adaptation, species and speciation, phylogenetic systematics, reconstruction of phylogeny, macro-evolutionary patterns in the fossil record and their interpretation.
CO: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
CR: the former BIOL 3900
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001, 1002, 2250
PR: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
3014 Biology and Ecology of Boreal and Arctic Seaweeds is a field course examination of seaweed biology and ecology with special study of living specimens in estuarine, fiordic and exposed coastal sites, demonstrating their physiological and ecological adaptations to cold-water habitats.
CR: the former BIOL 4014
OR: this course is offered at the Bonne Bay Marine Station during the Summer semester with two weeks of instruction followed by a week to complete course requirements
PR: Science 1807 and Science 1808; BIOL 2600 or equivalent
3041 Boreal Flora - inactive course.
3050 Introduction to Microbiology is a course in which the basic principles underlying microbial life are studied. Aspects include structure, function, bioenergetics and growth with an emphasis on prokaryotes. Also studied are viruses, microbial diseases, introductory principles of immunology and the control of microorganisms. The laboratory sessions provide training in culture and determinative techniques using microorganisms.
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001 and 1002; Biochemistry 2201 or the former 2101

3052 Food Microbiology (same as Biochemistry 3052) is the study of the microbiology of water and food with regard to the beneficial and detrimental roles of microorganisms on interaction with these systems. Emphasis will be on the microbiology of food, fermentations, food spoilage and food borne vectors of human disease.
CR: Biochemistry 3052 and the former Biochemistry 3054, Biochemistry 3401
LC: three hours per week
LH: three hours per week
PR: Science 1807 and Science 1808; BIOL 3050
3053 Microbiology for Nurses examines the fundamentals of microbiology with an emphasis on medical microbiology. The course will include topics such as: host responses to infections, human diseases caused by microorganisms, and the control and exploitation of microorganisms.
LH: 2
PR: Science 1807 and Science 1808; students admitted to the Bachelor of Nursing (Collaborative) program
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Biology, nor is it acceptable for any of the joint programs between Biology and other disciplines

3160 Insect Morphology and Physiology - inactive course.
3202 Comparative Vertebrate Anatomy examines the phylogenetic development and comparative anatomy of the vertebrates.
CR: the former BIOL 3200 or the former BIOL 3201
LH: 3
PR: Science 1807 and Science 1808; BIOL 1001 and 1002
3295 Population and Evolutionary Ecology is an introduction to the theory and principles of evolutionary ecology and population dynamics.
CR: the former BIOL 4290
LH: 3
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: Science 1807 and Science 1808; BIOL 2600; at least one of BIOL 2010, 2122 or 2210

3300 Introductory Entomology is a study of the classification and ecology of insects within an evolutionary framework. Topics will include molecular biological and classical morphological issues surrounding insect taxonomy, evolutionary based higher systematics, and the ecological roles of insects in a variety of ecosystems.

CR: BIOL 4150 and the former BIOL 4140
LH: 3
PR: Science 1807 and Science 1808; BIOL 2600. It is recommended that students have completed BIOL 2900

3401 Comparative Animal Physiology is a comparative study of the basic physiological processes, with special attention paid to those strategies invoked by animals which enable them to adapt to environmental changes.
CO: Biochemistry 3106 or 3206
CR: the former BIOL 4401
LH: 3
PR: Science 1807 and Science 1808; BIOL 2060 and 2210
PR: Biochemistry 3106 or 3206
3402 Principles of Plant Physiology is a consideration of the principles of plant physiology, including water relations, nutrition, metabolism, growth and development.
CO: Biochemistry 3106 or 3206
CR: the former BIOL 4403
LH: 3
PR: Science 1807 and Science 1808; BIOL 2010 and 2060
PR: Biochemistry 3106 or 3206
3500 Histology is a study of microstructure and ultrastructure of tissues and organ systems in vertebrates, particularly mammals, with emphasis on correlating structure and function.
LH: 3
PR: Science 1807 and Science 1808; BIOL 2060 and 2210
3530 Molecular and Developmental Biology is a study of developmental model systems with a focus on the underlying principles and molecular mechanisms involved in embryogenesis, organogenesis, morphogenesis, cellular differentiation, growth and regeneration in animals (vertebrates and invertebrates) and plants. Current cellular and molecular biology techniques and the implications of developmental biology in modern biological and health research will be emphasized
LH: 3
PR: Science 1807 and Science 1808; BIOL 2060 and BIOL 2250 or Biochemistry 2100

3540 Histotechnique - inactive course.
3610 Boreal Ecology is a study of the principal features of terrestrial ecosystems, with emphasis on the boreal region. This course may be offered in a usual 13 week semester or as a two-week field course

CR: Environmental Science 3131
LC: either three hours of lecture and three hours of laboratory per week or a two week field course that embodies equivalent instructional time
LH: either three hours of lecture and three hours of laboratory per week or a two week field course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; BIOL 2010, 2250, 2600 and 2900
Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
3640 Environmental Physiology of Animals (same as Ocean Sciences 3640) covers physiological adaptations of animals facilitating their survival in natural environments with emphasis on physiological and biochemical responses of animals to extreme environments. Starting with the fundamental basis of physiological mechanisms, the course explores various aspects and the integration of major physiological processes (metabolism, respiration, osmoregulation) and how these relate to ecological niche.
CR: the former BIOL 3403 or the former BIOL 4455, Ocean Sciences 3640
PR: BIOL 2060; Biochemistry 3206 or 3106
UL: may not be used to fulfill the physiology course requirement for a Biology major, honours or joint honours program.

3709 Field Course in Marine Principles and Techniques begins with a two-week field school immediately prior to the beginning of the Fall Semester. In the Fall Semester there are follow-up lectures, readings and submission of reports. The course is designed to introduce the principal marine environments, organisms and techniques. It is strongly recommended that this course be taken before either BIOL 3710, 3711 or 4810.

PR: Science 1807 and Science 1808; BIOL 2600; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550 and permission of the Head of the Department

3710 Biological Oceanography is an introductory course in biotic and abiotic factors controlling marine biomass and primary production, emphasizing plankton and fishes. It introduces students to major groups of marine phytoplankton, zooplankton, and fishes, emphasizing how the physical, chemical, and geological environments interact with biology to
define processes and pattern in marine organisms.
CR: Ocean Sciences 2000
LC: either three hours of lecture and three hours of laboratory per week or a two-week field course that embodies equivalent instructional time LH: either three hours of lecture and three hours of laboratory per week or a two-week field course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; BIOL 2122 and 2600
3711 Principles of Marine Biology is an introductory course in biology of the oceans. Introduces students to marine habitats and the organisms that inhabit them, emphasizing functional morphology, physiology, biodiversity, phylogeny, and ecology. Also includes introduction to marine biogeography, conservation, fisheries and pollution.
LC: either three hours of lecture and three hours of laboratory per week o a two-week field course that embodies equivalent instructional time
LH: either three hours of lecture and three hours of laboratory per week a two-week field course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; BIOL 2122, BIOL 2600
3712 Benthic Biology examines the biology of the aquatic benthos (bottomdwelling organisms); their origins, adaptations, life histories and ecological roles. This course may be offered in a usual 13 week semester or as a twoweek field course.
CR: the former Biology 3630
LC: either three hours of lecture and three hours of laboratory per week a two-week field course that embodies equivalent instructional time
LH: either three hours of lecture and three hours of laboratory per week or a two-week field course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; Biology 2122, 2600 and 3710
3714 Estuarine Fish Ecology Field Course examines community structure, function and distribution of northern coastal fishes in fjords and estuarine environments. Emphasis on sampling, field techniques, taxonomy, quantitative characterization, adaptations and habitat relationships. A comparative approach will contrast fish communities from other areas. To be held as a two week field course.

## PR: Science 1807 and Science 1808; BIOL 2600

3715 Ecology and Evolution of Fishes (same as the former BIOL 4600) examines the evolutionary history and ecology of the world's fishes, with particular emphasis on those of ecological, economical and cultural importance to Eastern Canada. Topics will include taxonomy, life histories, behaviour, zoogeography, evolutionary ecology, population biology, contemporary evolution, and conservation biology.
CR: the former BIOL 4600
LH: 3
PR: Science 1807 and Science 1808; BIOL 2600 and 2900
3750 Animal Behaviour I (same as Psychology 3750) is an introduction to the mechanisms, development, function and evolution of behaviour in animals. Topics include the history of ethology and comparative psychology, and behavioural ecology; methods of animal behaviour study, behaviour of animals in relation to physiology, learning, communication, mating systems, and other areas in Biology and Psychology.
CR: Psychology 3750
PR: BIOL 1001 and 1002; Statistics 2550 or any of the courses listed in the - credit restrictions of Statistics 2550

3811 Paleontology (same as Earth Sciences 3811) is taught and administered by the Department of Earth Sciences.
CR: Earth Sciences 3811, the former BIOL 3800, and the former Earth Sciences 3801
PR: either Earth Sciences 1002 and BIOL 2120 (or BIOL 1001 and 1002); or BIOL 2122 and 2210

3820 Foundations of Biology will introduce students to the development of biological understanding, from the classical Greeks to the present. The course consists of an online seminar series, which will cover topics such as the influence of Aristotle, Theophrastus, Hippocrates and Galen, the development of the microscope, the discovery of cells, paleontology, classification, Darwin and evolution, genetics, the discovery of DNA, multidisciplinary approaches to biology, and the impact of biology on everyday life.
OR: 10 on-line seminars prior to the beginning of the two week field course in Harlow and a two-week field component at Harlow Campus in the Spring semester
PR: completion of a minimum of 60 credit hours
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Biology

3950 Research Methods in Genetic Biotechnology (same as the former BIOL 4900) will include DNA extraction, DNA amplification by the Polymerase Chain Reaction (PCR), DNA cloning, DNA sequence analysis and Bioinformatics. Additional modules in gene expression and resequencing chip technologies may be included. Theory and methods will be introduced in a research framework.
CR: the former BIOL 4900
LH: Three hours of lecture and three hours of laboratory per week or a three week on-campus course that embodies equivalent instructor time
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: Science 1807 and Science 1808; BIOL 2060 and 2250
3951 Introduction to Bioinformatics (same as Computer Science 3550) deals with the development and application of computational methods to address biological problems. The course will focus on the fundamental concepts, ideas and related biological applications of existing bioinformatics tools. This course will provide hands-on experience in applying bioinformatics software tools and online databases to analyze experimental biological data, and it will also introduce scripting language tools typically used to automate some biological data analysis tasks.
CR: Computer Science 3550
LH: 3
PR: BIOL 2060 or Biochemistry 2201 or the former 2101, and one
Computer Science course at the 1000-level or above excluding
Computer Science 1400, or Computer Science 1600 and Computer
Science 2000; or Computer Science 2500 or Computer Science 2001, and one Biology course at the 1000-level or above excluding BIOL 2040 and BIOL 2041; or permission of the course instructor

4000 Bacterial Systematics - inactive course.
4010 Virology will examine topics about viruses infecting all forms of life including humans and other animals, plants and bacteria. The scope within the course ranges from the molecular biology of virus replication to virus evolution and ecology. Current issues concerning viruses and society are incorporated into the course including the practical applications of viruses, vaccines, and emerging viruses.
LH: Three hours of laboratory/seminar/discussion per week
PR: Science 1807 and Science 1808; BIOL 2900 and 3050
4012 Phycology - inactive course.
4040 Mycology - inactive course.
4050 Advanced Topics in Microbiology examines the beneficial and harmful properties of microbes including topics on industrial microbiology and the discovery of new antimicrobial agents. The scope within the course ranges from the genetic manipulation of microbes for useful purposes to the isolation of bacteria for applications in various fields. Current issues concerning microbiology and society will also be discussed including the practical applications of microbes and bacterial diseases affecting society. LH: 3
PR: Science 1807 and Science 1808; BIOL 3050
4122 Advanced Studies in Marine Animal Diversity (same as Ocean Sciences 4122) provides an in-depth examination of cellular physiological, behavioural and ecological adaptations in marine animals. Lectures will be combined with discussions of relevant papers from the primary literature on topics of current interest, which may relate to morphology, ecology, evolution, natural history, species interactions and practical applications. Students will also gain hands-on experience by designing and conducting research projects involving live or preserved animals.
CR: Ocean Sciences 4122
LC: either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time
LH: either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; BIOL 2122 and BIOL 2600
4141 Nematology - inactive course.
4150 Insect Systematics and Ecology-inactive course.
4180 General Parasitology - inactive course.
4182 Fisheries and Wildlife Parasitology - inactive course.
4200 Immunology (same as Biochemistry 4105 and Pharmacy 3006) is an introduction to the cells and organs of the innate and adaptive immune systems. The molecular and cellular basis of allergy, autoimmunity, vaccination and cancer immunology will also be discussed.
CR: Biochemistry 4105, Pharmacy 3006, and the former Pharmacy 4105
PR: Science 1807 and Science 1808; BIOL 2060
4241 Advanced Genetics has advanced topics in modern genetic analysis, including regulation of gene expression, developmental genetics, molecular basis of inherited disease, genomics, immunogenetics, behavioural genetics, and molecular evolution.
LH: 3
PR: Science 1807 and Science 1808; BIOL 2250 and Biochemistry 2201 or the former 2101
4245 Biophysics is an examination of the physical properties involved in defining diffusion, membrane properties, electrochemical potentials and the processes of bioenergetics within cells and organelles. Selected topics in biomechanics and the functioning of whole organisms with respect to size, shape, support, orientation, transport and motility.
LH: 3
PR: Science 1807 and Science 1808; BIOL 2060 and Biochemistry 2201
or the former 2101
4250 Evolutionary Genetics has advanced topics in the study of micro and macro-evolutionary phenomena. Genetic variation in natural populations; theory of genetic drift, mutation, migration, inbreeding, and natural selection; neutral theory of molecular evolution, patterns of nucleotide substitution, heritability and quantitative genetics.
LH: 3
PR: Science 1807 and Science 1808; BIOL 2250 and 2900
4251 Genomics will have lecture, seminar, and laboratory components. Topics covered will include Technical Foundations of Genomics, Global Gene Expression Profiling, Bioinformatics, Comparative Genomics, Microbial Genomics, Genomics and Medicine, Genomics and Agriculture, Environmental Genomics, and Ethical Issues of Genomics. Each topic will involve a lecture component, in which theory and methods will be taught using the textbook and journal articles. Some lecture and lab times will be devoted to seminars on methods and papers related to lecture or laboratory components of the course. In the lab component, students will have the opportunity to use state-of-the-art genomic techniques to address a research question.
LH: 3
OR: seminar
PR: Science 1807 and Science 1808; BIOL 2060, 2250
4255 Proteomics - inactive course.
4270 History of Biology -inactive course.
4306 Applied Biology -inactive course
4307 Global Change Biology examines the evolution of biosphere, global role of photosynthesis in oxygen and carbon dioxide balance, glacialinterglacial oscillations, carbon sources and sinks in modern biosphere, greenhouse gases emissions, population dynamics, origin and global impact of agriculture, global changes in Holocene and Anthropocene.
LH: 3
PR: BIOL 2600, BIOL 2900 or permission of the instructor
4360 Community and Ecosystem Ecology is a study of the basic principles, patterns and processes of ecological communities and ecosystems.

OR: a seminar/discussion group each week
PR: Science 1807 and Science 1808; BIOL 2250, 2600 and 2900 and one of BIOL 2010, 2122 or 2210; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550

## 4402 Electron Microscopy in Life Sciences - inactive course.

4404 Microbial Physiology is a study of the structure and growth of microorganisms. Themes covered in this course include the structure, function and regulation of the microbial cellular machinery, the hierarchical regulation of cellular activities, and communication between cells. Quantitative experimental methodology relating to microbial physiology is studied in the laboratory.
LH: 3
PR:Science 1807 and Science 1808; BIOL 2250 and BIOL 3050
4405 Landscape Ecology is an introduction to the theory and principles of landscape pattern and processes, including issues related to scale, networks, landform and vegetation patterns, species distributions, and natural and human-caused aspects of landscape change.
CO: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
PR: Science 1807 and Science 1808; BIOL 2600 and 18 credit hours in Biology; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550, or permission from the course instructor

4505 Systematics and Biogeography is a study of the geographical distributions of plants and animals with particular reference to temporal and spatial variability and to theories advanced to explain historical and recent distribution patterns.
CR: the former Geography 4170
LH: 3
PR: BIOL 2250, 2600, 2900 and one of BIOL 2010, 2122 or 2210

## 4510 Distribution Patterns in the Sea - inactive course.

4550 Principles of Endocrinology comprises an introduction to basic concepts concerned with how chemical messages are transmitted and received between cells to coordinate body functions. Hormonal control of adaptation, reproduction, metabolism, growth, digestion, and electrolyte homeostasis will be discussed. Although the endocrinology of invertebrates and lower vertebrates will be mentioned as appropriate, the main emphasis will be on mammalian and human endocrinology at the level of the whole organism.
LH: 3
PR: Science 1807 and Science 1808; BIOL 3401; Biochemistry 3106 or 3206
4601 Functional Biology of Fish (same as Ocean Sciences 4601) is an
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
introduction to anatomical, physiological and cellular aspects of selected processes in the life cycle of fishes.
CR: Ocean Sciences 4601
PR: BIOL 2060, 2210 or 3202, and BIOL 3401 or 3640
4605 Quantitative Methods in Biology (same as Statistics 4581 and the former Statistics 4605) is quantitative reasoning using verbal, graphical and statistical models of scaled quantities (units and dimensions). Exploratory and confirmatory analysis of field and laboratory data. Hypothesis testing, including randomization tests. Topics include the general linear model (ttests, ancova etc), correlation, multivariate methods, mixed models, Poisson and logistic regression.
CR: Statistics 4581 and the former Statistics 4605
LH: 3
PR: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550

4606 Bioinformatics: Biological Data Analysis (same as Computer Science 4550) provides students with the basis to analyse a variety of biological data within an integrated programming environment for data manipulation, calculation and graphical display. Students will learn to extract meaningful information from data generated by high-throughput experimentation. The course will introduce one such integrated programming environment and will explore the computational and statistical foundations of the most commonly used biological data analysis procedures.
CR: Computer Science 4550
LH: 3
PR: BIOL 3951 or Computer Science 3550, and Statistics 2550 (or equivalent), or permission of the course instructor

4607 Models in Biology is a study of the design and analysis of statistical and mathematical models for exploring the biology of cells, genes, species, populations, communities and ecosystems. Qualitative, quantitative and graphical techniques are used to analyze models and to compare theoretical predictions with empirical data. Classic models of systems biology, population growth, species competition, predator-prey interactions, ecosystem nutrient cycling, immunology, evolutionary invasion analysis, and species distribution will be covered.
LH: 3
PR: BIOL 2060, 2600 and 2900; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550. It is recommended that students complete BIOL 3295.

4620 Ornithology examines structure, classification, evolution, ecology and behaviour of birds, with particular reference to those of economic importance. Identification of the birds of Eastern Canada.
LH: 3
PR: Science 1807 and Science 1808; BIOL 2210 and 2600
4630 Mammalogy examines evolution, systematics, life histories and
distribution of mammals, with particular emphasis on eastern North American forms.

LH: 3
PR: Science 1807 and Science 1808; BIOL 2210 and 2600
4650 Conservation Biology I: Conservation in Biology and Geography (same as Geography 4650) is an examination of how biological and geographical principles can be applied to conserving biological diversity in the natural world under conditions of exploitation and habitat loss. Special emphasis will be given to relevant provincial examples.
CR: Environmental Science 4133, Geography 4650
OR: 3 hours of seminar/discussion group each week
PR: 30 credit hours in either Biology or Geography
4651 Conservation Biology II: Conservation in Practice examines issues relevant to global conservation science. Topics will be covered through a series of modules, including conservation genetics, costs and consequences of small populations, effects of anthropogenic activity on biodiversity, spatial dynamics, and the interface between science and society.
PR: BIOL 2900, 3295 and 4650
4701 Animal Behaviour II (same as Psychology 4701) is an examination of the behaviour of animals with particular emphasis on evolution and ecology. Topics include behavioural genetics and evolution, reproductive strategies, social behaviour, habitat selection, territoriality, foraging behaviour, and other topics in biology and psychology.
CR: Psychology 4701
LH: 3
PR: BIOL 3750 or Psychology 3750
4710 Experimental Marine Ecology of Newfoundland Waters is a twoweek field course examines the ecology of cold ocean environments, focussing on energy flux through marine pelagic and benthic flora and fauna of Newfoundland waters, and how the dynamics of this environment influence linkages among organisms in different habitats. The course will be field intensive with some lecture component and a strong hands-on field component. Students will identify local organisms and study how and why they vary in time and space. This course will be offered during two weeks of the Spring semester.
PR: Science 1807 and Science 1808; BIOL 2600

4750 Fisheries Ecology is the application of ecological principles to the problem of managing exploited fish populations. Laboratory exercises will be based on a simulation approach to fisheries problems using computer and animal models.
LH: 3
PR: BIOL 2600
4770 Research Experience in Animal Behaviour (same as Psychology 4770) allows students to gain research experience in selected areas of animal behaviour. This course may be offered in a usual 12-week semester or as a two-week field course.
CR: Psychology 4770
LC: either three hours of lecture per week or a two-week field course that embodies equivalent instructional time
PR: BIOL 3750 or Psychology 3750
4800 Advanced Palaeontology (same as Earth Sciences 4800) is a field, lecture, laboratory and seminar course dealing with selected topics in general and applied paleontology. Topics include measuring evolution and extinction, population paleontology, functional morphology, paleoecology, statistical methods for paleontological studies, and applications in petroleum, mining, and environmental studies. This course is taught and administered by the Department of Earth Sciences.
CR: Earth Sciences 4800
LH: 3
PR: Earth Sciences/BIOL 3811, and one of Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550 or Mathematics 2000

4810 Research Field Course in Marine Biology will consist of an intensive two-week field school designed to acquaint students with marine field research, experimental design, methodology and data analysis. Emphasis will be placed on individual projects. Projects must be designed and approved prior to the commencement of the course and will involve a written report. At the discretion of the Head of Department, another recognized field course may be substituted for BIOL 4810.
PR: Science 1807 and Science 1808; BIOL 3710 and any two of BIOL
2010, 2122 or 2210, and permission of the Head of the Department. It is strongly recommended that students take BIOL 3709 before 4810.
4820 Field Course in Terrestrial Biology will begin with a three-week field school immediately prior to the beginning of the Fall Semester. It is designed to acquaint students with terrestrial organisms and environments, and emphasis will be placed on survey and sampling techniques. In the Fall Semester the material and data collected in the field will be used in lecture and laboratory periods dealing with identification, analytical methods, and report compilation.
PR: Science 1807 and Science 1808; BIOL 2010, 2122, 2210, 2600 and permission of the Head of the Department. It is recommended that students complete BIOL 4605.

4822 Internship in Biology - inactive course.
4910-4920 Special Topics in Biology will be given for senior undergraduates and will be in a two-week format which will involve equivalent instruction time as a course on campus. These courses will cover a range of topics in specialized fields in Biology and may be offered at the Bonne Bay Field Station, at the Harlow campus or elsewhere as appropriate. They may be taught by visiting specialists when available.
499A and 499B Honours Dissertation is available only to students in the Honours Program. Requirements for the Dissertation are outlined under Honours Degrees.
PR: admission to the Honours Program

### 12.2.1 Work Term Descriptions

The following Work Terms are a requirement of the Biology (Cooperative) Program (BCOP) only.
199W Work Term I follows the successful completion of Semester 4. Students are expected to learn, develop and practice the high standards of behaviour and performance normally expected in the work environment. Students will observe, apply, analyse and/or evaluate concepts from biology courses in the work place and further their understanding of the principles of biology and how they are applied in a professional setting.
CH: 0
LC: 0
PR: Admission to the Biology Major and successful completion of semester 4

299W Work Term II follows the successful completion of Semester 6. Students are expected to further develop and expand their knowledge and work-related skills and should be able to accept increased responsibility and challenge. In addition, students are expected to demonstrate an ability to deal with increasingly complex work-related concepts and problems. Students will continue to observe, apply, analyse and/or evaluate concepts from biology courses in the workplace and continue to further their understanding of the principles of biology and how they are applied in a
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
professional setting. Students are required to complete one or more assignments, as outlined in the syllabus.

CH: 0
LC: 0
PR: BIOL 199W
399W Work Term III follows the successful completion of semester 7 or Work Term II. Students will have sufficient academic grounding and work experience to contribute in a positive manner to the problem-solving and management processes needed and practiced in the work environment. Students should become better acquainted with their discipline of study, should observe and appreciate the attitudes, responsibilities, and ethics normally expected of professionals and should exercise greater independence and responsibility in their assigned work functions.
CH: 0
LC: 0
PR: BIOL 299W

### 12.3 Chemistry

## Chemistry courses are designated by CHEM.

1010 Introductory Chemistry I examines descriptive chemistry; measurements; atoms; molecules; the mole; mole calculations and reaction stoichiometry; the balancing of redox reactions; gases; thermochemistry; introduction to chemical kinetics and equilibrium; acids and bases.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 1810
LC. 4
LH: 3 hours biweekly alternating with tutorials
OR: 1.5 hour tutorial alternating with labs
PR: Science 1807 and Science 1808. It is recommended that students have successfully completed high school Academic Mathematics 3201, or a pass in any university level mathematics course
UL: only 6 science credit hours will be awarded for a major or honours in Chemistry from the following course groups: CHEM 1010/1050/105 or CHEM 1810/1200/1001 (Grenfell Campus), or CHEM 1010/the former 1011/the former 1031

1050 General Chemistry I builds on basic chemistry concepts from high school. Topics include gases; thermochemistry; atomic structure; periodic properties; chemical bonding including valence bond theory; hybridization and introduction to molecular orbital theory; properties of liquids and solids.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 1200
LC: 4
LH: 3
PR: Science 1807 and Science 1808; CHEM 1010 with a grade of at least $60 \%$ or high school CHEM 3202 with a grade of at least $65 \%$. It is also recommended that students have successfully completed high school Mathematics 3200 or 3201.
UL: only 6 science credit hours will be awarded for a major or honours in Chemistry from the following course groups: CHEM 1010/1050/1051, or CHEM 1810/1200/1001 (Grenfell Campus), or CHEM 1010/the former 1011/the former 1031
1051 General Chemistry II builds on CHEM 1050 topics and on basic chemistry concepts from high school. Topics include solutions, kinetics, chemical equilibrium, equilibria involving acids and bases including polyprotic acids, buffers, acid-base indicators, titration curves, solubility and complex ion equilibrium, thermodynamics, and electrochemistry.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 1001 and the former CHEM 1011
LC: 4
LH: 3
PR: Science 1807 and Science 1808; CHEM 1050 (or CHEM 1200 with a minimum grade of $65 \%$ )
UL: only 6 science credit hours will be awarded for a major or honours in Chemistry from the following course groups: CHEM 1010/1050/1051, or CHEM 1810/1200/1001 (Grenfell Campus), or CHEM 1010/the former 1011/the former 1031
2100 Analytical Chemistry I is an introduction to analytical chemistry and includes preparation of samples and standards, calibration methods, statistical treatment of data, spectrophotometric trace analysis, gravimetric analysis and volumetric analysis including acid-base titrations, precipitation titrations, oxidation-reduction titrations, complexometric titrations and titrations in non-aqueous systems. Also introduced are liquid-liquid and other types of extraction, and chromatography with key methods of detection. Theoretical, practical and problem-solving aspects are covered.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the
course.
CR: the former CHEM 3100
LH: 3
PR: Science 1807 and Science 1808; minimum 60\% in CHEM 1051 or a minimum $65 \%$ in either 1001 or the former 1031

2210 Introductory Inorganic Chemistry focuses on fundamental concepts in the chemistry of $\mathrm{s}, \mathrm{p}$, and d block elements and their compounds. Emphasis will be placed on periodic trends in physical and chemical properties, molecular symmetry, molecular orbital diagrams, simple crystal structures, Lewis acid/base theory, and introductory coordination chemistry.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
LH: 3
PR: Science 1807 and Science 1808; minimum 60\% in CHEM 1051 or a minimum 65\% in CHEM 1001

2301 Thermodynamics and Kinetics builds upon knowledge of physical chemistry from first year. It covers the three laws of thermodynamics for ideal and real systems as well as chemical kinetics. Topics in thermodynamics include the thermodynamics of ideal and real gases, phases, and solutions, the Maxwell relations, equilibria between phases, and in electrolyte solutions. The integrated rate laws for simple and complex mechanisms, and the temperature dependence of reaction rates in terms of kinetic molecular theory are some of the topics discussed in the kinetics section of the course.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CR: the former CHEM 2300
LH: 3
PR: Science 1807 and Science 1808; minimum 60\% in CHEM 1051, or a minimum 65\% in either CHEM 1001 or the former CHEM 1031; Mathematics 1001. Physics 1051 or Physics 1021 is recommended.
2302 Quantum Chemistry and Spectroscopy examines the quantum mechanics of simple systems such as the particle in a box, the harmonic oscillator, linear rotor, and hydrogen-like atoms. Topics also include orbital quantum numbers, spin, many electron atoms, an introduction to quantum mechanical methods, the electronic structures of molecules, bonding, and symmetry. Furthermore, electronic, rotational, and vibrational spectroscopy will be discussed as well as modern applications of spectroscopy and lasers.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CO: Mathematics 2000 is recommended
CR: the former CHEM 3301
LH: 3
PR: Science 1807 and Science 1808; a minimum 60\% in CHEM 1051, or a minimum 65\% in either CHEM 1001 or the former CHEM 1031;
Mathematics 1001 and Physics 1051 or Physics 1021
2400 Introductory Organic Chemistry I is a course on bonding involving carbon; conformations and stereochemistry; introduction to functional groups and nomenclature; properties, syntheses and reactions of hydrocarbons, alkyl halides, alcohols and ethers.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 2440
LH: 3
OR: 2 hours of tutorial weekly
PR: Science 1807 and Science 1808; a minimum 60\% in CHEM 1051, or CHEM 1010 and the former CHEM 1011 with a grade of at least $80 \%$ in each; or the former CHEM 1011 with a grade of at least $85 \%$; or CHEM 1001 (or the former CHEM 1031) with a grade of at least $65 \%$

2401 Introductory Organic Chemistry II is an introduction to the interpretation of mass, infrared, ${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR spectra; properties, syntheses and reactions of simple aromatic and heteroaromatic compounds, ketones, aldehydes, amines, carboxylic acids and their derivatives; aldol and related reactions.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: CHEM 2440
LH: 3
OR: 2 hours of tutorial weekly
PR: Science 1807 and Science 1808; CHEM 2400
2610 Introductory Chemical Oceanography (same as Ocean Sciences 2100) provides an introduction to the fundamental chemical properties of seawater and the processes governing the concentrations of elements and compounds in the oceans. It is an introduction to the sources, distribution, and transformations of chemical constituents of the ocean, and their relation to biological, chemical, geological, and physical processes. Topics include: controls on average concentration of chemicals in the ocean; vertical and horizontal distributions of ocean constituents; air-sea interactions;
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
production, export, and remineralization of organic matter; the ocean carbon cycle; human-induced changes; stable isotopes; and trace elements.

CR: Ocean Sciences 2100
PR: the former CHEM 1011 or 1051 or 1001 which may be taken concurrently

3110 Analytical Chemistry II (same as the former CHEM 4110) builds upon the student's knowledge from CHEM 2100 (Analytical Chemistry I) and applies it to a more advanced level of instrumental quantitative analysis. The course examines error treatment, atomic emission an absorption spectroscopy, gas and liquid chromatography, capillary electrophoresis and supercritical fluid chromatography and extraction techniques, electoranalytical chemistry, molecular and atomic mass spectrometry, x-ray spectroscopy, ion and electron spectroscopy, surface analysis techniques and thermogravimetric analysis.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: the former CHEM 4100, the former CHEM 4101, or the former CHEM 4110
LH: 3
PR: Science 1807 and Science 1808; CHEM 2100 or the former CHEM 3100

3210 Main Group and Materials Chemistry is a detailed examination of the chemistry of the $s$ and $p$ block elements and modern applications of inorganic chemistry in materials and nanotechnology.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
LH: 3
PR: Science 1807 and Science 1808; CHEM 2210, CHEM 2301 or CHEM 2302; CHEM 2401; or permission of the instructor

3211 Inorganic Chemistry is a detailed examination of the structure, bonding, and chemistry of the d block elements.
AR: attendance is required in the laboratory component of this course Failure to attend may result in a failing grade or deregistration from the course
LH: 3
PR: Science 1807 and Science 1808; CHEM 2210; CHEM 2301 or 2302 ; CHEM 2401; or permission of the instructor

3303 Statistical Thermodynamics and Rate Theories examines physical chemistry from the microscopic viewpoint. Topics include probability distributions, quantum statistical mechanics, statistical thermodynamics, ensembles, kinetics and introduction to statistical rate theories as well as an introduction to computational chemistry (lab).
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CR: the former CHEM 3300
LH: 3
PR: Science 1807 and Science 1808; CHEM 2301 (or Engineering 4602), CHEM 2302, Mathematics 2000 (or Engineering 3424)

3411 Synthetic Organic Chemistry I is an introduction to organic synthesis. It covers the principles of organic synthesis and a range of reactions that are used in its pursuit. These reactions fall under the general headings of functional group interconversion (oxidation, reduction, protection, deprotection, substitution, elimination) and skeleton-building (reactions of carbon nucleophiles with electrophiles, transition metalcatayzed reactions, pericyclic reactions and reactions involving reactive intermediates).
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
LH: 3
PR: Science 1807 and Science 1808, CHEM 2401
3600 Marine Chemistry - inactive course.
4150 Special Topics in Analytical Chemistry is a course for senior level undergraduate students and covers one or a number of specialized topics of current interest in analytical chemistry.
PR: CHEM 3110
4151 Analytical Separations and Organic Mass Spectrometry examines advances in the traditional chromatographic techniques, the development of new analytical tools in separation science, the interfacing of mass spectrometers to chromatographic instruments, and other mass spectrometric techniques.
AR: attendance is required in the laboratory component of this course. Failure to attend may result in a failing grade or deregistration from the course.
LH: 3
PR: Science 1807 and Science 1808; CHEM 3110 (or the former CHEM 4100 or the former CHEM 4101 or the former CHEM 4110)
4152 Electroanalytical Techniques examines the principles and theory of
dynamic electrochemistry, voltammetry, stripping analysis, electro-chemical sensors and detectors.
PR: CHEM 3110 (or the former CHEM 4100 or the former CHEM 4101 or the former CHEM 4110)

4156 Analytical Method Development and Sampling comprises the development and critical evaluation of analytical methods and sampling protocols for analyses in complex matrices, including those relevant to environmental, medical, food, and forensic sciences.

## PR: CHEM 3110

4201 Coordination Chemistry in Biological Molecules - Structural, Mechanistic and Magnetic Studies examines the role of certain transition elements e.g. iron, copper, cobalt, and zinc, in proteins and enzymes will be discussed in terms of structural features, the natural ligands, magnetic properties, mechanisms, etc., and reinforced with examples of 'model compounds'. Magnetic theory, in particular for polynuclear transition metal complexes, will also be developed.

## PR: CHEM 3211

## 4202 Selected Topics in Main Group Chemistry - inactive course.

4203 Organometallic Chemistry is principles and applications of organometallic chemistry with emphasis on compounds of the transition metals, lanthanides and actinides. A study of synthetic methods, structure, bonding, reactions and applications of these concepts to organic synthesis and to catalysis.
PR: CHEM 3211
4204 Inorganic Reaction Mechanisms and Catalysis is a survey of inorganic and organometallic reactions, their mechanisms and kinetic characteristics. In addition, stereochemical non-rigidity, reactions of coordinated ligands and homogeneous catalysis are discussed.
PR: CHEM 3211
4205 Photochemistry of Transition Metal Complexes is an introduction to the theory of electronic excited states in transition metal complexes. Applications to artificial photosynthesis, photodynamic therapy, molecular photovoltaics and molecular electronics.

CO: CHEM 3211 and CHEM 2302
PR: CHEM 3211 and the former CHEM 3301 or CHEM 2302
4206 Green Chemistry examines the benefits and limitations of new methods aimed at reducing the environmental impact of chemical processes including waste prevention, hazard/risk reduction, catalysts, renewable feedstocks and alternative solvents.
PR: CHEM 2401 and CHEM 3211
4250 Special Topics in Inorganic Chemistry is a course for senior level undergraduate students and covers one or a number of specialized topics of current interest in inorganic chemistry.
PR: CHEM 3210 or 3211
4304 Advanced Quantum Chemistry examines exact solutions to the Schrodinger equation, introduction to approximate methods, modern methods (wavefunction and density functional theories), spectroscopy, and applications of computational chemistry.

CR: the former CHEM 4300
PR: CHEM 2302 (or the former CHEM 3301) and Mathematics 2260. Due to the requirement of Mathematics 2260, students wishing to take this course should plan ahead.

4305 Advanced Statistical Thermodynamics examines intermolecular forces, the properties of liquids, the solvation of molecules and ions, and the structure and dynamics of macromolecules within the framework of statistical thermodynamics.
CR: the former CHEM 4303
PR: CHEM 3303 or the former CHEM 3301
4350 Special Topics in Physical Chemistry is a course for senior level undergraduate students and covers one or a number of specialized topics of current interest in physical chemistry.
PR: CHEM 3303
4410 Bio-organic Chemistry is a study of the major classes of biomolecules, their structure, function, and their chemistry. The chemistry and the biochemical reactions of carbohydrates, amino acids, peptides, lipids, coenzymes, nucleic acids, polyketides, and the shikimic acid pathway. An introduction to natural products and secondary metabolites. Synthesis of peptides, nucleosides and polynucleotides. Biosynthesis of fatty acids, terpenes, polyketides, shikimates, peptides and polynucleotides.

## CR: the former CHEM 3410

## PR: CHEM 2401

## 4411 Topics in Medicinal Chemistry - inactive course.

4420 Physical Organic Chemistry is an introduction to the quantitative and qualitative theories of reactions and reactivity and their application to organic reaction mechanisms and to mechanism elucidation.

CR: the former CHEM 4400 and the former CHEM 4401
PR: CHEM 2302 or the former CHEM 3301, and CHEM 3411 or the former
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

## CHEM 3401

4430 Synthetic Organic Chemistry II examines modern synthetic methods with particular attention placed on the synthesis of enantiomerically enriched compounds and newer methods for the formation of carbon-carbon bonds. Designing syntheses of complex organic molecules.
CR: the former CHEM 4410
PR: the former CHEM 3401 or 3411 . CHEM 4420 is strongly recommended.

4450 Special Topics in Organic Chemistry is a course for senior level undergraduate students and covers one or a number of specialized topics of current interest in organic chemistry.
PR: CHEM 3411
4500 Advanced Nuclear Magnetic Resonance Spectroscopy examines advances in modern and traditional NMR techniques, the principles and applications of solution and solid-state NMR spectroscopy and micro imaging.
AR: Attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the
course
LH: 3
PR: CHEM 2302 and 2401
4620 Environmental Chemistry applies fundamental principles of chemistry to reactions and processes in the environment. Reaction mechanisms, physical processes, and application of analytical techniques to environmental chemistry will be discussed. The course will cover the chemistry underpinning current environmental problems such as long-range transport of persistent pollutants, photochemical smog, and climate change. CO: CHEM 3110
CR: Environmental Science 4249
PR: CHEM 2400, CHEM 2301, CHEM 3110
4701 Principles of Pharmaceutical Chemistry will provide the necessary foundation of knowledge to enable students to understand the principles of drug discovery, the main pharmacokinetics properties of drugs, the relationships between the chemical structure of drugs and their biological actions, their toxicity and side-effects, and the kinetics of inhibitory mechanisms and the metabolic reactions of drugs. It will also provide an overview of pharmaceutical regulatory affairs.
PR: Biochemistry 3105 or the former CHEM 3410 or permission of the instructor

490A/B Honours Research in Chemistry is available only to students in Chemistry Honours or Chemistry Joint Honours Programs. These courses are two single-semester, linked courses based on independent research carried out under the supervision of a faculty member in the Department of Chemistry. Research undertaken for these courses must have a clear disconnect from any research previously conducted. These courses are mandatory for Honours Chemistry students. A grade of pass in 490A is required to proceed to 490B. A written thesis is to be handed in by the end of the course. 490A and 490B are to be taken in the Fall and Winter semesters in the same academic year.
CH: 6
PR: admission to the Honours Chemistry Program or Chemistry Joint Honours Program and honours standing
UL: may be taken by students not in an Honours program or without Honours standing with the permission of the Head of the Department and a research supervisor.

### 12.4 Computer Science

Computer Science courses are designated by COMP.

### 12.4.1 First Year Courses

1000 Computer Science - An Introduction takes a breadth-first overview approach to the discussion of important aspects of computer science including fundamentals in algorithms, binary data representation, Boolean logic, systems software, networking concepts, introductory programming, databases, and selected Computer Science subfields.
CR: the former COMP 2742, Engineering 4424, Mathematics 2320.
Students cannot receive credit for COMP 1002 if completed with, or subsequent to, Mathematics 2320.
LH: 3
1001 Introduction to Programming is an introduction to fundamental programming techniques, primitive data types, and to simple algorithms and their design concepts
CR: the former COMP 1710
LH: 3
1002 Introduction to Logic for Computer Scientists introduces methods of reasoning and logic tools that underlie computer science. In particular, this course covers propositional and predicate logic, sets and other discrete structures, as well as modular arithmetic and basic counting, with emphasis
on their applications in computer science.
CR: the former COMP 2742, Engineering 4424, Mathematics 2320.
Students cannot receive credit for COMP 1002 if completed with, or subsequent to, Mathematics 2320.
LH: 3
1003 Foundations of Computing Systems provides an in-depth introduction to foundational topics in computer science: algorithms and data structures, theory of computing, machine architecture and their historical context.
CO: COMP 1002 or Mathematics 2320
LH: 3
PR: COMP 1001
1400 Computing in the 20th Century and Beyond will give an overview of the development of computing technologies over the last 75 years as well as both the perception of these technologies by, and their impact on, society. The course will be organized chronologically by decade, and within each decade will examine the dominant computing developments, their image in various print and pictorial media, and their social impact. The aim is to give students of all disciplines an appreciation of the abilities and limitations of computer technology and how such technologies interact with society.

1401 Computing at the Movies will both examine and counter common misconceptions about computing and the computing profession. This will be done by contrasting depictions of various aspects of computing in various movies and documentaries produced over the last 60 years with the reality of these aspects as given in selected readings and course lecture notes.

1510 An Introduction to Programming for Scientific Computing introduces students to basic programming in the context of numerical methods with the goal of providing the foundation necessary to handle larger scientific programming projects. Numerical methods to solve selected problems from Physics, Chemistry, and Mathematics will be covered.
CR: the former COMP 2602 and the former Mathematics 2120

## LH: 2

PR: Mathematics 1000
1600 Basic Computing and Information Technology offers an overview of information technology. It provides students with an understanding of basic concepts and necessary skills required to use spreadsheet, database and presentation software to manage, analyze, and present data.
CR: the former Business 2700, the former COMP 2650 and the former
COMP 2801

### 12.4.2 Second Year Courses

2000 Collaborative and Emergent Behaviour is a survey of computation as a means of understanding, modelling, and describing artificial and natural systems. The emergence of complex behaviour from the interaction of simple rules governing individual components is illustrated and discussed, as well as the role of communication between system components. Selected systems to be studied will be drawn from different topic areas which may include the worldwide web, the mind (cognitive science), formal logic, autonomous robotics, chaos and fractals, and bioinformatics. Each topic will incorporate an associated laboratory experience.
LH: 3 hours bi-weekly
2001 Object-Oriented Programming and Human-Computer Interaction advances from Introduction to Programming and studies object-oriented programming. Additional topics include event-driven programming, program correctness and simple refactoring, as well as interfaces and humancomputer interaction. A brief overview of programming languages is also provided.
CR: the former COMP 2710
LH: 3
PR: COMP 1001, COMP 1003, and Mathematics 1000
2002 Data Structures and Algorithms covers fundamental data structures, algorithms and algorithm design techniques. A problem-driven course, it focuses on computational problem solving from designing an efficient algorithm to implementing it using appropriate data structures.
CR: the former COMP 2711
LH: 3
PR: COMP 1001, COMP 1002 or Mathematics 2320, and COMP 1003
2003 Computer Architecture introduces computer architecture at the digital logic implementation level, at the instruction set level, and at the level where programming languages are translated into the underlying machine instructions.
CR: the former COMP 3724
LH: 3
PR: COMP 1001, COMP 1002 or Mathematics 2320, and COMP 1003
2004 Introduction to Operating Systems introduces fundamental techniques for interfacing between computer software and hardware platforms, including the composition of, and connections within, a multilevel operating system. Students learn how to design substantial parts of an
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
operating system
CR: the former COMP 3725
PR: COMP 2002, COMP 2003
2005 Software Engineering introduces students to the different software process models, to project management and the software requirements engineering process, as well as to systems analysis and design as a problem-solving activity.

## CR: the former COMP 3716

PR: COMP 2001
2006 Computer Networking introduces students to the use of programming interfaces for computer networking and to understand how the Internet works on the level of protocols. It focuses on the most commonly used of those protocols that are in the vast majority of modern computer systems.
CH: 1
CO: COMP 2004
CR: the former COMP 3715
PR: COMP 2001, COMP 2002
2007 Introduction to Information Management introduces the basic knowledge needed for managing large volumes of data. It covers topics in information management and database systems from storage and retrieval to security and privacy of data.
CH: 1
CO: COMP 2004
CR: the former COMP 3754
PR: COMP 2002
2008 Social Issues and Professional Practice covers ethical and social considerations of computing to provide students with the basis to address these issues by ethical and technical actions. Case studies are used to illustrate ethical and social issues of computing.
CH: 1
CR: the former COMP 2760
PR: COMP 1003
2100 Social Web Analysis covers the analysis of social network structures, the flow of data within them and the methods to extract useful information about these networks, their participants and the content of their communication. Security and trust issues are also covered.

## PR: COMP 1003

2300 Introduction to Multimedia Programming is an introduction to programming and computer science with an emphasis on the development of multimedia applications. The course introduces the fundamental principles of programming, including object-oriented and event-diviven programming. Students will develop an understanding of how to use and create classes and methods and combine them with multimedia libraries to produce animations, handle input from keyboard and mouse, and import sounds and videos to produce multimedia applications which can be directly deployed on the Internet.
CR: the former COMP 1550
LH: 3
PR: COMP 1003
2500 Data Analysis with Scripting Languages introduces the use of scripting languages to solve common data analysis tasks. The control structures and expressions of the language are first discussed. Script solution to storing/retrieving data sets, searching data sets, and performing numeric and statistical calculation are covered. Plotting and visualization for data sets are also presented.
PR: COMP 1510 or the former COMP 1700 or the former COMP 1710 or COMP 1000 or COMP 1001 (or equivalent)
2510 Programming in $\mathrm{C}_{2} \mathrm{C}_{++}$is a comprehensive treatment of the $\mathrm{C}_{2} \mathrm{C}_{++}$ programming languages. It is intended for students with some first programming experience. This course starts with a discussion of fundamentals of C and C++, moves on to the object-oriented aspects of C++, and introduces some advanced topics. It is an essential course for mastering the power of this rich programming language.
CR: Engineering 3891
LH: 3
PR: COMP 1510 or the former COMP 1550 or the former COMP 1700 or the former COMP 1710 or COMP 1000 or COMP 1001 or Engineering 1020 (or equivalent)
2718 Development Tools, Work Flows and Concepts covers tools, work flows and concepts used in software development in a concentrated introductory set of topics. The essential work flows (with their underlying concepts) used to edit, build, test, combine with existing software and find existing software are introduced. The tools covered include text editors, programming language translators, file management tools, debuggers, scripting tools, source control tools, and building, testing and deployment tools. The architecture and use of an Integrated Development Environment are discussed.
LH: 3
PR: COMP 2001 or COMP 2500 or COMP 2510 or the former COMP 2710

### 12.4.3 Third Year Courses

3100 Web Programming studies the Web information system from a programming perspective. It teaches how Web data are transferred across the network, how to design interactive browser contents, and how to provide dynamic pages from the server.
CR: the former COMP 3715
PR: COMP 2006
3200 Algorithmic Techniques for Smart Systems covers basic algorithmic techniques and data structures that are used to embed basic intelligent behaviors, such as problem solving, reasoning and learning in software systems and agents.
CR: the former COMP 4753
PR: COMP 2001 or the former COMP 2710, COMP 2002 or the former

## COMP 2711, and Statistics 1510 or Statistics 2550

3201 Introduction to Nature-Inspired Computing provides an overview of popular nature-inspired computing methods. Methods that are inspired by both biological and non-biological systems are considered. These methods have been applied to solve problems in various areas of computing such as optimization, machine learning, and robotics. Particular examples of natureinspired computing methods studied include cellular automata, neural networks, evolutionary computing, swarm intelligence, artificial life, and complex networks. Contributions made in the field of nature-inspired computing that have led to advances in the natural sciences are also discussed.
CR: the former COMP 4752
PR: COMP 2002 or the former COMP 2711
3202 Introduction to Machine Learning introduces concepts and algorithms in machine learning for regression and classification tasks. The course gives the student the basic ideas and intuition behind model selection and evaluation, and selected machine learning methods such as random forests, support vector machines, and hidden Markov models.
PR: COMP 3200; or COMP 2001 or the former COMP 2710, COMP 2002

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\text { or the former COMP 2711, and Statistics 2550; and Mathematics } 2050
$$

3300 Interactive Technologies provides exposure to traditional desktop, mobile and games contexts with respect to interaction design theory and practice. The impact of context on design principles is explored. An introduction to each programming context will be provided and a minimal set of software development tools for each context will be introduced. Practical application of interaction design principles will involve design and prototyping of desktop, mobile and games applications.
PR: COMP 2001 or the former COMP 2710
3301 Visual Computing and Applications provides students with the fundamental knowledge and skills in the fields of computer vision, computer graphics, and visualization. Visual perception is responsible for most of our impressions about the world around us. This course introduces how computers are used to both mimic the human visual system (e.g., recognize shapes) and to create visual content (e.g. synthesize images). Related techniques on image synthesis, processing and analysis are discussed under a unified framework. How visual computing principles were used to create visual effects in movies and commercials is also examined.
PR: COMP 2002 or the former COMP 2711, Mathematics 2000, and Mathematics 2050

3401 Introduction to Data Mining introduces students to the basic concepts and techniques for data mining and knowledge discovery. Students will develop an understanding of the essential data mining technologies, and be able to design and evaluate methods for simple data mining applications.
PR: COMP 2002 or the former COMP 2711, COMP 2007 or the former COMP 3754, and Statistics 2550

3550 Introduction to Bioinformatics (same as Biology 3951) deals with the development and application of computational methods to address biological problems. The course will focus on the fundamental concepts, ideas and related biological applications of existing bioinformatics tools. This course will provide hands-on experience in applying bioinformatics software tools and online databases to analyze experimental biological data, and it will also introduce scripting language tools typically used to automate some biological data analysis tasks.
CR: Biology 3951
LH: 3
PR: Biology 2060 or Biochemistry 2201 or the former 2101, and 3 credit hours in Computer Science courses at the 1000-level or above excluding COMP 1400, COMP 1401, COMP 1600 and COMP 2000; or COMP 2500 or the former COMP 2710 or COMP 2001, and 3 credit hours in Biology courses at the 1000-level or above excluding Biology 2040 and Biology 2041; or permission of the course instructor

3700 Industrial Experience is a course for students who are admitted to CICS. Students are required to register for this non-credit course every semester during their internship. This course is open only to students who have been accepted into the Internship Program and provides an opportunity for qualified students to obtain rewarding job experience of 8,12
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
or 16 months of continuous duration, during the course of their studies. CH: 0
PR: admission to the Co-operative Internship in Computer Science (CICS)
3710 Vocational Languages is a study of several programming languages of vocational significance. The use of appropriate programming paradigms to solve some significant problems will be illustrated.
PR: COMP 2002 or the former COMP 2711
3718 Programming in the Small demonstrates the tools and techniques used in the construction of small software systems. The software tools and techniques to be covered include analysis and design of software components, software construction tools (e.g. linkers, builders, debuggers), software library use and design, and system integration.
PR: COMP 2002 or the former COMP 2711
3719 Theory of Computation and Algorithms is an introduction to formal algorithmic problem solving. Various algorithm design techniques that sometimes yield efficient solutions are studied. Deterministic and nondeterministic machines (finite state automata, pushdown automata and Turing machines) are discussed and used to efficiently solve problems such as the String Matching Problem, the parsing of Context-free Languages, and to introduce the theory of NP-completeness. In addition, Turing machines are used to prove the unsolvability of certain problems. Tractable, intractable and undecidable problems are contrasted. Basic issues related to parallelization are discussed as well.
CR: the former COMP 3711 and the former COMP 3740
PR: COMP 2002 or the former COMP 2711; and Mathematics 2320 or COMP 1002

3731 Introduction to Scientific Computing main objectives are the development of algorithms for the numerical solution of mathematical problems and the study of the numerical stability of these algorithms. The efficiency of these algorithms with respect to speed and storage requirements is considered as well. Emphasis is also placed on the study of the sensitivity of selected problems to perturbations in the data. There is also a brief introduction to the development of numerical algorithms that take advantage of advanced computer architectures, such as pipeline processors, array processors and parallel processors.
CR: Mathematics 3132
PR: COMP 1001 or the former COMP 2710, Mathematics 2000, Mathematics 2050

3753 Computational Aspects of Linear Programming is an introduction to the Linear Programming Problem (LPP). The emphasis is placed upon developing the most recent and numerically reliable algorithms for the solution of the Linear Programming Problem. The numerical stability of these, algorithms will be examined as well. Geometric understanding of the LPP. Simplex method for the LPP. Sparse matrix LPP. Duality and postoptimality analysis. Extensions to the simplex algorithm. Principles of interior algorithms for the LPP.
PR: COMP 1001 or the former COMP 2710, Mathematics 2050

### 12.4.4 Fourth Year Courses

4300 Introduction to Game Programming is an introductory course for students interested in learning the fundamentals of game programming. Topics include vector math for games, fundamentals of rendering, introduction to animation and artificial intelligence, collision detection, game physics and user-interfaces. Students are required to write a fully functional game during the course.
PR: COMP 2001 or the former COMP 2710, Mathematics 2050, and 6 credit hours in Computer Science courses at the 3000 level or above (COMP 3301 and COMP 3731 are recommended)
4301 Computer Vision (same as Engineering 8814) studies how to develop methods that enable a machine to "understand" or analyze images. The course introduces the fundamental problems in computer vision and the state-of-the-art approaches that address them. Topics include feature detection and matching, geometric and multi-view vision, structure from X , segmentation, object tracking and visual recognition.
CR: Engineering 8814
LH: six 3-hour sessions per semester
PR: COMP 3301 or Engineering 7854 or permission of the instructor
4302 3D Computer Graphics introduces the students to the state-of-the-art concepts and developments in the field of 3D computer graphics. The underlying algorithms, as well as the basic techniques to develop interactive 3D graphics systems including games and simulators, are presented. Topics of the course include 3D geometrical transformations, 3D projections, 3D modeling and rendering, 3D graphics languages and systems. Advanced photorealistic rendering and image-based rendering techniques may also be covered.
CR: the former COMP 4751
PR: COMP 3301
4303 Artificial Intelligence in Computer Games provides an introduction to specific state-of-the-art algorithmic techniques and data structures that are used to efficiently implement human-like abilities (e.g., awareness,
memory, rational decision-making (under uncertainty), movement, cooperation in groups) in computer game agents.
PR: COMP 3200
4304 Data Visualization covers interactive representation of data using a modern programming library. Topics include an introduction to the software platform and the principles for data selection, analysis, design and creation of dynamic visualizations. Students produce interactive web-based objects, addressing problems in the presentation and understanding of large data collections. The techniques discussed are applicable to different sources and types of data.
CR: the former COMP 4767
PR: COMP 2001 or the former COMP 2710, COMP 2002 or the former COMP 2711

4550 Bioinformatics: Biological Data Analysis (same as Biology 4606) provides students with the basis to analyse a variety of biological data within an integrated programming environment for data manipulation, calculation and graphical display. Students will learn to extract meaningful information from data generated by high-throughput experimentation. The course will introduce one such integrated programming environment and will explore the computational and statistical foundations of the most commonly used biological data analysis procedure
CR: Biology 4606
LH: 3
PR: Biology 3951 or COMP 3550, and Statistics 2550 (or equivalent), or permission of the course instructor

4711 Structure of Programming Languages covers programming language design considerations; syntactic and semantic structure; survey of typical features and operations; analysis of facilities for control and data structuring; language extensibility; execution models; formal specification of programming languages.
PR: COMP 3719, COMP 2003 or the former COMP 3724
4712 Compiler Construction studies properties of formal grammars and languages; syntax-directed parsing and code generation; top-down and bottom-up parsing methods; LL(k) and LR(k) grammars and parsers; Code optimization; compiler writing tools.
PR: COMP 3719, COMP 2003 or the former COMP 3724
4715 and 4717 Special Topics in Programming Languages will have topics to be studied announced by the Department.
4718 Survey of Software Engineering surveys the major topics of software engineering. Areas covered include: requirements capture, system design and design approaches, verification and validation (including formal methods and testing), and management of the software development process.
PR: COMP 2005 or the former COMP 3716
4721 Operating Systems studies the design and implementation of an operating system's kernel. The main components used in operating system implementations include: context switches, process management, memory management, interprocess communication, file systems and system calls. The data structures and algorithms used in implementing the above components are studied. The different architectural styles of kernel implementation are also considered. Real-time operating systems are also discussed.
CR: Engineering 8894
PR: COMP 2004 or the former COMP 3725
4723 Introduction to Microprocessors examines the architecture and instruction sets for several microprocessors. The use of microprocessors as device controllers; comparisons of hardware and programmed techniques; microprocessor interfacing with external devices; methods of I/O; bus structures; modern microprocessor support devices are discussed.
LH: Minimum of three hours per week. Practical experience with basic principles will be obtained through laboratory experience.
PR: COMP 2003 or the former COMP 3724
4726-4729 Special Topics in Computer Systems will have topics to be studied announced by the Department.
4734 Matrix Computations and Applications is an introduction to linear algebra; solution to linear systems; scaling, improving and estimating accuracy; the linear least squares problem; the eigenvalue problem; singular value decomposition of a matrix; the generalized eigenvalue problem.
PR: COMP 3731
4736-4739 Special Topics in Numerical Computations will have topics to be studied announced by the Department.

4740 Design and Analysis of Algorithms will give an overview of techniques for the design of efficient optimal-solution and heuristic algorithms. It will include an introduction to various advanced data structures for set and string processing that are used to further optimize algorithm efficiency.
PR: COMP 3719
4741 Formal Languages and Computability is an in-depth study of
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
various types of formal machines and their associated languages. Effective computability and other formalisms, such as lambda calculus will be studied as well.

## CR: the former COMP 3740

PR: COMP 3719
4742 Computational Complexity is an in-depth discussion of computational complexity theory. Topics covered in the course include: models of computation (for both serial and parallel computations); complexity measures; reducibility; complexity classes (NP, PSPACE, NC, LOGSPACE and P); and randomized computations.
PR: COMP 3719
4743 Graph Algorithms and Combinatorial Optimization discusses classical problems in combinatorial optimization and graph algorithms, including matching, colorability, independent sets, isomorphism, network flows and scheduling. Special families of graphs are discussed and algorithms that would otherwise be NP-hard or complete are shown to be polynomial time when restricted to such families.
PR: COMP 3719
4745-4749 Special Topics in Theoretical Aspects will have topics to be studied announced by the Department.

4750 Introduction to Natural Language Processing covers tasks involving human languages, such as speech recognition, text understanding, and keyword-based information retrieval which underlie many modern computing applications and their interfaces. To be truly useful, such natural language processing must be both efficient and robust. This course will give an introduction to the algorithms and data structures used to solve key NLP tasks, including utterance understanding and generation and language acquisition, in both of the major algorithmic paradigms used today (rulebased and statistical). The emphasis will be primarily on text-based processing though speech-based processing will be addressed where possible.
PR: COMP 3719 and Statistics 1510
4754 Database Systems introduces students to database processing, database management systems and database design considerations. It will cover the theory and methodologies essential for the relational database design, implementation, manipulation, optimization and management.
PR: COMP 2004 or the former COMP 3725, COMP 2007 or the former

## COMP 3754

4756 Image Processing will centre on the key analytical and algorithmic tools and concepts of digital image processing. Topics will include Transformations, Enhancement, Encoding, Data Bases, Segmentation and Description.
CR: Engineering 7854
LH: 3
PR: COMP 3719
4759 Computer Networks looks at how the operation of computer networks requires the following: a) communication between two computers, b) information transfer between two computers not directly connected, and c) services that need computer communication. This course focuses on the standard solutions and services used to fulfill the previous requirements. These include: physical transmission of signals, reliable communication based on unreliable communication channels, the routing of messages between connected computers to reach computers that are not directly connected, e-mail, file transfer, name servers, remote terminal access and the World Wide Web. Particular attention will be placed on the workings of the Internet.

PR: COMP 2006 or the former COMP 3715, and COMP 2004 or the former COMP 3725

4762 Introduction to Computational Molecular Biology will give an overview of computational problems and algorithms for these problems associated with a variety of analyses of biological molecular data.
PR: COMP 3719
4766 Introduction to Autonomous Robotics examines the fundamental constraints, technologies, and algorithms of autonomous robotics. The focus of this course will be on computational aspects of autonomous wheeled mobile robots. The following topics will be covered: major paradigms in robotics, methods of locomotion, kinematics, simple control systems, sensor technologies, stereo vision, feature extraction, modelling uncertainty of sensors and positional information, localization, SLAM, obstacle avoidance, and 2-D path planning.
LH: 3
PR: COMP 2002 or the former COMP 2711, Mathematics 2000 Mathematics 2050, and Statistics 1510 or Statistics 2550 or the former Statistics 2510
4768 Software Development for Mobile Devices focuses on the design and implementation of software in a mobile networking environment. The primary topics to be covered in this course include software engineering, network computing, graphics programming, and human-computer interaction for mobile devices. A modern mobile device with advanced networking and graphic features, including multi-touch interaction and motion sensors will be used as the primary platform for development in this course.
LH : one and one-half hours per week
PR: COMP 2008 or the former COMP 2760, COMP 2006 or the former COMP 3715, and COMP 2005 or the former COMP 3716
4770 Team Project has as its main objective to develop a working prototype of a software system as a team effort. A group of students will work on a project for a term, experiencing the advantages and difficulties of team projects.
$A R$ : attendance is required
PR: COMP 2003, COMP 2005, COMP 2006, COMP 2007, and 6 credit hours in Computer Science courses at the 3000-level or above; or the former COMP 3715, the former COMP 3716, the former COMP 3724, and the former COMP 3754

4780 Honours Project introduces computer science honours students to research activities, familiarizes them with a special problem in computer science, and provides independent study on an advanced topic under the direct supervision of a member of the computer science faculty. The topic is decided in consultation with the supervisor. The student is required to produce a written report on the project, to include the literature search on the topic, and to present this work at a departmental seminar prior to the last week of the semester.
PR: admission to the honours program and permission of the Head of Department

4800-4825 Special Topics will be offered as departmental resources permit.
CO: Special topics courses are not offered on a regular basis, but whenever departmental resources permit. For these reasons, the corequisites can vary each time the courses are offered.
PR: Special topics courses are not offered on a regular basis, but whenever departmental resources permit. For these reasons, the prerequisites can vary each time the courses are offered.

### 12.5 Earth Sciences

The first digit of each course number designates the level (year) of the course. The second digit indicates the area of Earth Sciences into which the course best fits, as follows:

## Second Digit

0 - mineralogy and petrology
1-geophysics 2 - economic geology
3 - stratigraphy and marine geology
4 - structural geology and tectonics
5 - geochemistry
6 - environmental geoscience and technical fields
7 - sedimentation, petroleum geology and geomorphology
8 - paleontology
9 - general and dissertation
Earth Sciences courses are designated by EASC.

### 12.5.1 First Year

1000 Earth Systems is a survey of the structure, function and interrelations of Earth's lithosphere, hydrosphere, atmosphere and biosphere. Topics include an exploration of the physical and chemical properties of planetary
materials, forces driving and sustaining Earth systems, and biological modifiers (including humankind) on the Earth today.
LH: 3
1001 Evolution of Earth Systems - inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

1002 Concepts and Methods in Earth Sciences provides an introduction to a broad range of concepts concerning the development of the geological record and the Earth; practical methods for collection of field based data; topics in map interpretation and geometric analysis, stratigraphy, paleontology, structure, petrology, and geophysics. The course is presented with an emphasis on the development of practical skills needed to pursue a career in Earth Sciences.
LH: 3
PR: EASC 1000

### 12.5.2 Second Year

2030 Mineralogy provides an introduction to crystallography and the structure of minerals; introduction to crystal optics; study of the rock forming minerals and minerals of economic significance. Laboratory work comprises study of the structures and symmetries of minerals, chemistry of rock forming minerals, introduction to transmitted light microscopy of rocks, hand specimen recognition of common rocks and minerals.
CO: EASC 2502
CR: the former EASC 203A/B
LH: 3
PR: EASC 1000 and 1002 with a grade of at least $55 \%$ in each, Chemistry 1051 (or 1001), Physics 1051 (or 1021 or 1054), and Mathematics 1000

2031 Mineralogy and Petrography examines the optical and chemical properties of rock-forming minerals, the petrography and classification of igneous and metamorphic rocks and applications of relevant phase equilibria to the study of minerals. Laboratory work comprises optical mineralogy and petrography of igneous and metamorphic rocks.
CO: Mathematics 1001
CR: the former EASC 203A/B
LH: 3
PR: EASC 2030, 2502, Mathematics 1001
2150 The Solar System describes the basic astronomy of the Solar System, tracing the search to understand motion of the Sun, Moon and planets in the sky; modern observations of planets, moons, comets, asteroids and meteorites and what they tell us about the origin and evolution of the Solar System.
UL: not acceptable as one of the required courses for the Minor, Major or Honours programs in Earth Sciences

2311 Geoscience Communication is an introduction to the fundamentals of preparation of written and oral geoscience reports, emphasizing organization, correct use of terminology, concise description, preparation of abstracts and introductions, integration of numerical data and publicationquality illustrations, and oral presentation skills. Topics for reports will be selected from the subject matter of other 2000 level Earth Sciences courses. LC: 2
OR: tutorials three hours per week
PR: Earth Sciences 2905 and 6 credit hours in English
2401 Structural Geology provides an introduction to basic concepts; the physics of rock deformation, the classification and descriptive geometry of major and minor structures and their relationship to stress and strain. Laboratory work will concentrate on analysis of structural orientation data, and the analysis of structures in geological maps and cross-sections. Earth Sciences majors are advised to complete field course, EASC 3905, immediately following completion of this course.
CR: the former Geology 3120 or the former EASC 3120 or the former EASC 3400
LH: 3
PR: EASC 2905 or (for students following a Minor in Earth Sciences) permission of the Head of the Department

2502 Introduction to Geochemistry provides an overview of both low- and high-temperature geochemistry. Topics include: origin and classification of the elements; chemical differentiation of the solar system and solid Earth; aqueous geochemistry and the stability of minerals; radiogenic and stable isotopes. Geochemical concepts are illustrated using data and processes drawn from Earth systems. The laboratory component emphasizes the development of numerical skills needed in geochemistry.
CO: Mathematics 1001
LH: 3
PR: EASC 1000 and 1002 with a grade of at least $55 \%$ in each, Chemistry 1051 (or 1001)
2702 Sedimentology and Stratigraphy is a study of the origin and composition of sediments with a focus on depositional processes and resulting sedimentary structures. Study of environments of deposition and the stratigraphic framework of sedimentary successions. Laboratories involve local field trips, petrographic analysis, and the study of hand samples of sedimentary rocks.
CO: EASC 2030
CR: the former Geology 3070 or the former EASC 3070 or the former EASC 3701
LH: 3

PR: EASC 1000 and 1002 with a grade of at least $55 \%$ in each
2905 Introduction to Geological Mapping is based on approximately six days of geological mapping in Precambrian rocks near St. John's, and two days of in-class work preparing a digital map and written report. Emphasis is placed on the recognition and description of sedimentary and igneous rocks in the field, and techniques of geological mapping and the taking of field notes. This course will be given during a special session immediately preceding the fall semester.
AR: attendance is required
CH: 2
CR: the former EASC 2310 or the former EASC 2300
OR: field based course
PR: EASC 1000 and 1002 with a grade of at least $55 \%$ in each, and an application to the Head of the Department

2914 The Earth's Energy Resources: Past, Present and Future - inactive course.

2915 The Earth's Material Resources: Past, Present and Future inactive course.

2916 Natural Hazards on a Dynamic Earth describes the surface of the Earth being in a constant state of change, thereby posing risks and challenges for society. A basic understanding of geological processes in the past and present provides some context for appreciating the risks related to earthquakes, volcanic activity and mass movements, challenges related to water resources, land-use planning and waste disposal, and some background to interpret sources and consequences of climate change. The course will provide a broad perspective on contemporary issues facing society. This course is designed for students taking Earth Sciences as an elective subject. This course complements traditional disciplines such as history, economics, and political science and should be of particular interest to prospective teachers.
CR: Environmental Science 2360
UL: not acceptable as one of the required courses for the Minor, Major or
Honours programs in Earth Sciences.
2917 Gems: The Science and Politics introduces students to precious and semi-precious stones both from the perspective of their nature and origin and from the perspectives of geography and the socio-political issues of mining, recovery, trade and cartels. The properties that confer value upon gems (colour, clarity, cut and carat), the techniques used to enhance, fake and imitate gems and the techniques used to detect fraudulent "gems" will be covered. The course will include discussion of the diamond industry in Canada and consideration of some famous gems. This course is designed for students taking Earth Sciences as an elective subject. This course complements traditional disciplines such as history, economics, and political science and should be of particular interest to teachers.
UL: not acceptable as one of the required courses for the Minor, Major or
Honours programs in Earth Sciences.
2918 Earth's Story is an overview of Earth's dynamic past of episodes of supercontinent collision and breakup, massive flooding, global warming and freezing, magnetic field reversals and continents travelling over large distances. The evolution of life is tied to this history and has had equally dramatic turns of rich growth and catastrophic extinction. Discussion will be based on Canadian geology and includes an introduction to techniques used to decipher the rock record.
UL: not acceptable as one of the required courses for the Minor, Major or
Honours programs in Earth Sciences.
2919 Introduction to Marine Geology (same as Ocean Sciences 2200) is a study of the formation and evolution of oceans, including plate tectonics, mid-ocean ridges (birth place of oceans), subduction zones (where oceans are consumed), sedimentary environments such as estuaries, deltas, beaches and barrier islands, continental shelves, slopes and deep abyssal plains and special topics, including anoxic events, evolution of tides, atmosphere-ocean interactions, formation of banded iron formations, snowball Earth, black and white smokers, and how Earth modulates its climate through atmosphere, hydrosphere, biosphere and lithosphere interactions.
CR: Ocean Sciences 2200
PR: EASC 1000 with a grade of at least $55 \%$

### 12.5.3 Third Year

3030 Mineralogy and Materials Science provides a review of elementary crystallography, introduction to space groups and crystal structures, bonding, properties of metals, semiconductors and insulators, crystallographic aspects of order-disorder, solid solution and mixing. Crystal growth, chemical zoning and diffusion. Phase changes in the solid state (exsolution, polymorphism and polytypism). Students will be introduced to the techniques used to study solids (X-ray diffraction, scanning and transmission electron microscopy, electron-microprobe analysis, luminescence, and computer simulation). Laboratory work will emphasize practical skills using these techniques. Examples will be chosen from among minerals, ceramics, semiconductors, metals and glass, making the course suitable for Earth Scientists, Engineers, Chemists and Physicists.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

IH. 3
PR: EASC 2031 or permission of the instructor
3054 High-Temperature Geochemistry and Igneous Petrology is an integrated course dealing with the geochemistry, origin and classification of igneous rocks. Topics include trace element geochemistry; physical properties of magmas, physical and chemical processes in magma chambers (fractional crystallization, differentiation, assimilation and partial melting), phase equilibria and application to magmas, petrology of the mantle, and igneous rocks of specific tectonic settings (oceanic lithosphere, continental margins, continental lithosphere). Laboratories include geochemical calculations and examination of rock samples and thin sections.
CR: the former EASC 3053 in combination with the former 2503
LH: 3
PR: EASC 2031 and 2502
3055 Thermodynamics and Metamorphic Petrology is an integrated course dealing with the geochemistry, origin and classification of metamorphic rocks. Topics include thermodynamic background and kinetics (transfer of mass and energy in geochemical systems of the Earth's interior, thermodynamic laws, phase equilibria, solid-solid reactions, reaction rates); metamorphic facies, field gradients, isograds and reactions; mineral assemblages and textures of common metamorphic rocks. Laboratories include thermodynamic and phase diagram problems, hand specimen and thin section studies.
CR: the former EASC 3053 in combination with the former 2503 LH: 3
PR: EASC 2031 and 2502, Mathematics 1001
3170 Seismic and Potential Fields Methods in Geophysics examines fundamentals of seismic energy transmission in the Earth; basic methods in seismic exploration - data acquisition, processing and interpretation for refraction and reflection surveys; fundamentals of gravity and magnetic data acquisition, processing and interpretation; introduction to gravity and magnetic modelling.
LH: 3
PR: Physics 1051 (or 1021 or the former 1054); Mathematics 1001;
Mathematics 2000 or Statistics 2550 or the former Statistics 2510;
EASC 2905 or permission of the Head of the Department for studen following a Minor in Earth Sciences or a Major in Environmental Physics
3172 Electric and Electromagnetic Methods in Geophysics is an introduction to electrical and electromagnetic methods in geophysics applied in mineral exploration, petroleum well logging and environmental studies, and examples of application of various techniques; use of data processing and modelling techniques in interpretation; introduction to radiometric methods used in mineral and petroleum exploration. The laboratory component involves outdoor surveys using geophysical equipment, and computer-based presentation and analysis of collected data using modern geophysical software.
AR: attendance is required in the laboratory component of this course.
Failure to attend may result in a failing grade or deregistration from the course.
CO: EASC 2905 or permission of the Head of the Department
LH: 3
PR: Physics 1051 (or 1021 or the former 1054); Mathematics 1001;
Mathematics 2000 or Statistics 2550 or the former Statistics 2510; EASC 2905 or permission of the Head of the Department for students following a Minor in Earth Sciences or a Major in Environmental Physics
3179 Mathematical Methods for Geophysics covers subjects required for quantitative analysis of geophysical phenomena. Vector calculus with emphasis on integral theorems is covered in the context of Maxwell's equations; Derivations and solutions of ordinary and partial differential equations with emphasis on hyperbolic, parabolic and elliptic equations in the context of the wave, heat, and potential-field equations, respectively; tensor algebra and analysis in the context of theory of elasticity and electromagnetism; Fourier analysis as a tool for solution of differential equations and signal analysis. The course may also include such topics as the calculus of variations, curvilinear coordinates on differentiable manifolds, differentiation in the sense of distributions.
LH: 3
PR: Mathematics 2000, Physics 2055 and 2820
3210 Economic Mineral Deposits is an introduction to the study of mineral deposits and definition of the basic physio-chemical parameters of ore deposit formation. The course involves a systematic review of genetic models for the principal types of metallic mineral deposits, and links these models to a common theme of the relationship between lithosphere-hydrosphere-biosphere interactions and metallogeny. Laboratory exercises involve examination of representative suites of samples from different types of metallic mineral deposits and provide an introduction to the use of reflected light microscopy.
LH: 3
PR: either EASC 2031, 2502 and 2905; or EASC 2031 and Chemistry
3211; or Engineering 3610 and the former Engineering 3205

3420 Global Tectonic Processes examines how horizontal and vertical motions of the Earth's surface are influenced by heat and mass transfer within its interior. Surface motions are described qualitatively and quantitatively within the framework of plate tectonics, and used to identify major controls on the igneous, metamorphic and sedimentary rock records. Laboratory exercises emphasize geologic and geophysical applications of the material developed in lectures.
CR: the former EASC 2070, 2161, 2400 and 4901
LH: 3
PR: EASC 2031, 2401, 2502, 2702, Mathematics 1000 and 1001, Physics 1021 or 1051

3600 Environmental Geology examines the application of basic concepts and fundamental principles of geochemistry in evaluating natural and human-induced change through time on the interaction of the Earth's lithosphere, hydrosphere, atmosphere and biosphere; includes the effects of contaminants on global change. Laboratory time will be used for short fieldbased studies and for exercises examining the effects of contaminants on global change.
LH: 3
PR: either EASC 2502; or EASC 1000, Chemistry 2210 and the former CHEM 2300

3610 Hydrogeology (same as the former EASC 4610) examines geology and its relationship to groundwater occurrence: basic theory, groundwater flow systems, surface-groundwater interactions, field and laboratory techniques, and changes in water quality due to contaminant transport and sorption.
CR: Environmental Science 4479, the former EASC 4610
LH: 3
PR: Physics 1051 (or 1021); Mathematics 2000 or Statistics 2550 or the former Statistics 2510; EASC 2502
3611 Engineering Geology - inactive course.
3700 Geomorphology (same as Geography 3150) is a study of the relationships between geomorphic processes and landforms. Practical work will involve collection of data and samples in the field and analytical laboratory techniques.

## CR: Geography 3150

LH: 3
PR: EASC 2905 or Geography 2102; Mathematics 1000
3702 Lithification, Diagenesis and Sedimentary Rock Properties provides a conceptual and practical overview of the transformation of sediments into sedimentary rocks through compaction, cementation and mineral reactions, and the resultant modifications of rock composition, rock fabrics, and associated porous media characteristics (e.g. porosity). Both descriptive and analytical methods are integrated in laboratories that include carbonate and sandstone petrology (hand samples and thin sections), geological analysis of selected wireline logs, and the analysis of fluid reservoir properties.
LH: 3
PR: EASC 2031, 2702 and 2905
3705 Field Course in Sedimentology, Reservoir Architecture and Sequence Stratigraphy is a ten day field and lecture based course normally offered in the first two weeks of the Spring semester that aims to teach students to use sedimentological and palaeontological data for palaeoenvironmental analysis. The course will demonstrate the use of sedimentary facies models and facies architectural studies in reservoir geology, particularly when coupled with the principles of sequence stratigraphy. Students will be taught to create sedimentary logs and facies architectural panels.
CO: EASC 3811, 3905
CR: the former EASC 4700 or the former Geology 4700
OR: field based course
PR: EASC 2702, 3811, 3905
3811 Paleontology (same as Biology 3811) outlines the major changes in life forms from Archean times through the Phanerozoic to the present day, including details of invertebrate and vertebrate faunas and major floral groups; mechanisms and effects of mega- and micro-evolution in the fossil record; biology and classification of organisms and summaries of their geological significance in biostratigraphy, paleoecology and rock-building; relationships between major cycles of evolution and extinction to global processes.
CR: Biology 3811 or either the former EASC 3801 or the former Biology 3800
LH: 3
PR: either Biology 2120 (or Biology 1001 and 1002) and EASC 1002; or Biology 2122 and 2210
3905 Field Methods in Structural Geology and Stratigraphy is based on approximately 5 days of geological mapping in Precambrian rocks near St. John's. Emphasis is placed on application of techniques of structural analysis. Evenings will be dedicated to data analysis and preparation of structural maps and sections. Students are advised to complete this course immediately following EASC 2401 . This course will be offered during a
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
special session immediately following the examination period in a given semester.
AR: attendance for all of the field school days is required. Failure to attend may result in a failing grade or withdrawal from the course.
CH: 1
OR: field based course
PR: EASC 2401 and 2905 and an application to the Head of the Department

### 12.5.4 Fourth Year

4053 Petrogenesis of Igneous Rocks investigates the origin of topical and important groups of igneous rocks based on experimental petrology, phase equilibria and application of geochemical tools. It further investigates the classification of igneous rocks, including the study of volcaniclastic rocks and aspects of physical volcanology. The laboratory component of the course emphasizes practical aspects of igneous petrology including geochemical characterization and use of hand-sample and field criteria.
LH: 3
PR: EASC 3054 and 3420
4054 Metamorphic Petrology examines relationships between metamorphism and tectonics, representation and interpretation of metamorphic mineral assemblages using compositional phase diagrams and petrogenetic grids; equilibrium thermodynamics and thermobarometry; determination of P-T-t paths. Laboratories include use of the electron microprobe to collect data for use in calculations of the conditions of formation of metamorphic assemblages, and various types of software applicable to metamorphic petrology.
LH: 3
PR: EASC 2401, 3055 and 3420
4105 Field Course in Applied Geophysics is a field based course with an emphasis on environmental and mineral exploration applications. It consists of a data collection module normally offered during a special session immediately before the Fall semester, followed by a processing and interpretation module during the first part of the Fall semester. Field techniques used may include ground probing radar, refraction seismology, magnetic surveying, gravimetry, electrical and electro-magnetic methods. For computer based processing, students make use of modern mapping and geophysical software.
AR: attendance required
OR: field-based course
PR: EASC 3170, 3172 and Mathematics 2000
4171 Advanced Seismology examines techniques involved in the acquisition, processing and interpretation of multichannel seismic reflection data. Introduction to elastic properties of rocks. Introduction to advanced processing and interpretation techniques as applied to qualitative and quantitative evaluation of hydrocarbon reservoir characteristics. This course has a laboratory component designed to provide hands-on experience with data processing and interpretation.
LH: 3
PR: EASC 3170 and 4179
4173 Advanced Electrical, Electromagnetic and Potential Fields Methods examines advanced techniques in electrical and electromagnetic exploration methods including advanced IP, airborne EM surveys, EM and IP modelling, and inversion techniques; advahced methods in gravity and magnetic field exploration techniques including $21 / 2-\mathrm{D}$ and $3-\mathrm{D}$ modelling and inversion, map processing techniques, and excess mass determination. LH: 3
PR: EASC 3170, 3172, 4179, and Physics 2820
4179 Digital Signal Processing is an introduction to the theory and basic computational techniques of digital signal processing in geophysics. Topics covered include: sampling, Fourier transformation, design and application of digital filters, deconvolution, spectral analysis, two dimensional signal processing, with emphasis ongeophysical applications.
LH: 3
PR: EASC 3170, 3172, 3179, and Physics 2820
4211 Economic Geology provides a detailed look at the methodologies and techniques used in the study of mineral deposits and their applications in case histories. Laboratory exercises involve solving problem sets using the various types of data from selected case studies.
LH: 3

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\text { PR: EASC } 3054 \text { or } 3055 \text {; and } 3210
$$

4302 Advanced Marine Geology examines the geology and geophysics of ocean basins; discussion of methods of oceanic exploration, the history and development of ocean basins, interrelationships between ocean water, marine organisms, sedimentary and igneous processes.
PR: EASC 1001 or 1002 and completion of any 15 credit hours in core courses at the 3000 and/or 4000 levels (see General Note 5) in Biology, Biochemistry, Chemistry, Earth Sciences, Physics, or Geography.

4310 Earth Science Concepts, Materials and Techniques for

Archaeologists - inactive course.
4400 Advanced Techniques in Structural Geology examines modern techniques of structural analysis applied to fold and fault systems including progressive deformation and strain analysis, fold mechanisms, fold morphology and classification, fold sections and profiles, superposed folding, fault geometry and morphology, brittle and ductile shear zones, and construction of balanced cross-sections.

LH: 3
PR: EASC 2401 and 3905 and a minimum of 6 credit hours in Earth Sciences at the 3000 level

4405 Field Course on the Geology of Newfoundland is a field-based course consisting of in-class lectures and student seminars, and a weeklong field trip within the island of Newfoundland. The classroom portion of the course may be offered in an accelerated format. The course provides an introduction to the geological history and tectonic development of Newfoundland. The field portion of the course will normally be offered during a special session either preceding or following any given semester
OR: lecture and field-based course
PR: 15 credit hours in Earth Sciences at the 3000 and/or 4000 levels
including EASC 3420, and permission of the instructor
4420 Tectonics and Crustal Evolution is a lecture and seminar course covering secular change and tectonic evolution in Earth history from the Archean to Mesozoic, featuring examples from the North American geological record. The course will draw on and link concepts from a variety of Earth Science disciplines and provide an overview of the geological evolution of North America in a tectonic context.
CR: the former EASC 4901
OR: seminar
PR: EASC 3420
4502 Advanced Geochemistry focuses primarily on the application of trace, radiogenic and stable isotope geochemistry to constrain the origin, mass balance and chemical fluxes within the Earth's lithosphere and asthenosphere. The course permits students to complete assignments in aspects of geochemistry that reflect their career interests.

## LH: 3

PR: EASC 2031 and 2502 and a minimum of 6 credit hours in Earth Sciences at the 3000 level
4503 Mineral Exploration Geochemistry is an examination of the application of geochemistry to mineral exploration, covering: the lithogeochemical characteristics of ore deposits, their host rocks, and element dispersion from them; the principles of sampling and analysis in exploration geochemistry; approaches to the statistical analysis, graphical presentation, and interpretation of survey results; and the design of effective geochemical surveys. Particular emphasis will be placed on case studies relevant to exploration in Newfoundland and Labrador. Laboratory/seminar sessions involve working with exemplary data sets, using computer-based software for statistical analysis and software for searching large databases and viewing the spatial relationships of different types of map data relevant to the mineral exploration industry.
LH: 3
OR: seminar
PR: EASC 3210

## 4601 Petroleum Origin and Occurrence - inactive course

4605 Environmental Geoscience Field School is a field-based course normally offered during a special session immediately before the Fall semester followed by laboratory analytical work during the Fall semester. The aim of this course is to investigate anthropogenic impacts on the environment using geochemical, hydrological, and microbial methods. Emphasis is placed on site investigation, sample collection and preparation techniques, instrumental analysis, and data analyses.
AR: attendance required
OR: field-based course
PR: EASC 2502, EASC 3600, Mathematics 1001, and one of Mathematics 2000, Statistics 2550, or the former Statistics 2510

4620 Groundwater Modelling examines the physical and chemical processes controlling groundwater flow and contaminant transport from a numerical modelling viewpoint. Methods for numerical modelling are the main focus. Students gain hands-on experience in using computer software packages to solve practical problems.
LH: 3
PR: EASC 3610 (or the former EASC 4610) or Environmental Science 4479 or permission of instructor

4702 Sedimentary Basins and Hydrocarbon Exploration (same as the former EASC 4602) provides a review of sedimentary basin types and associated petroleum systems including concepts applicable to petroleum generation, migration and accumulation. Regional-scale stratigraphic and structural concepts/models are presented as a framework for hydrocarbon fluid flow and entrapment. Laboratories include description and analysis of data typical of basin- and regional-scale exploration and appraisal of hydrocarbon resources using a variety of integrated, interdisciplinary techniques (geological, geophysical and geochemical).
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

CR. EASC 4601 and the former EASC 4602
LH: 3
PR: EASC 2401, 2702, 3170 and 3420
4703 Environmental Change and Quaternary Geography (same as Archaeology 4150 and Geography 4150) covers methods of reconstructing Quaternary environments; effects of Quaternary environmental change on landforms, with special reference to North America; development and characteristics of glacial and non-glacial climates.
CR: Archaeology 4150, Geography 4150
LH: 3
PR: 6 credit hours in Earth Sciences or Physical Geography courses at the 3000 -level; or permission of the instructor

4704 Reservoir Characterization (same as the former EASC 4603) provides a review of the sedimentary, stratigraphic and structural setting of hydrocarbon reservoirs and the geological controls on reservoir quality. Reservoir types and methods of study are presented to evaluate their key properties for the development and production of hydrocarbons. Laboratories include detailed subsurface correlation and mapping, log analysis, interpretation of reservoir data (e.g. capillary pressure, porosity, permeability and production data)
CR: EASC 4601 and the former EASC 4603
LH: 3
PR: EASC 2401, 2702, 3170 and 3702
4720 Carbonate Depositional Environments and Diagenesis examines carbonate environments and their facies models with examples from modern and ancient settings. Diagenetic environments and diagenetic controls on rock properties, particularly porosity, are examined, as well as their application in the reconstruction of the diagenetic history of a sedimentary basin and in the characterization of hydrocarbon reservoirs. The application of chemostratigraphy to correlation is discussed. The laboratory exercises apply hand specimen, thin section and geochemical methods to investigate carbonates from different depositional settings and a wide spectrum of diagenetic environments covered in lectures
CO: EASC 3811
LH: 3
PR: EASC 2031, 2702, and 3811
4800 Advanced Paleontology (same as Biology 4800) is a field, lecture, laboratory and seminar course dealing with selected topics in general and applied paleontology. Topics include measuring evolution and extinction, population paleontology, functional morphology, paleoecology, statistical methods for paleontological studies, and applications in petroleum, mining, and environmental studies.
CR: Biology 4800
LH: 3
PR: EASC 3811, and Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550 or Mathematics 2000
4902 Early Evolution of the Earth - inactive course.
4903 Global Change is a lecture and seminar course that studies the interaction of the atmosphere, biosphere and lithosphere; topics covered include the evolution of the biosphere, fluid circulation, global geochemical budget, global environmental changes, and chemical evolution of the hydrosphere.
OR: seminar
PR: EASC 1001 or 1002, and Biology 2120 (or Biology 1001 and 1002);
and completion of any 15 credit hours in core courses at the 3000 and/ or 4000 levels (see General Note 5) in Biology, Biochemistry,

Chemistry, Earth Sciences, or Physics; or permission of the instructor.
4905 Field Course in Geological Mapping and Regional Tectonics is a two-week field school designed to allow application of techniques introduced in the third year, and to provide an introduction to the Appalachian geology of western and central Newfoundland. Reports must be submitted for grading during the fall semester.
OR: field based course
PR: EASC 2401, 3055, 3420, and 3905; and permission of the Head of the Department

4912 Planetary Geology is a classroom- and laboratory-based course that provides students with a basic knowledge of the geology of the Moon, Mars, asteroids and the moons of the satellites of the outer solar system; the petrology and geochemistry of meteorites and their importance to understanding the origin of the planets; impact cratering processes and rock products including those on Earth; and instrumentation for planetary exploration. The course combines lectures and laboratory exercises that examine data sets from planetary missions and specimens of extraterrestrial materials. Students learn how geological processes that have shaped Earth also have operated on other planets, moons and asteroids in our solar system.
PR: EASC 2031, 2702, 2905, and 3420
4910-4920 (Excluding 4912) Special Topics in Earth Sciences are lecture and seminar courses given for undergraduates in their fourth or fifth year who wish to gain more specialized knowledge in a particular field of Earth Sciences than is possible through the standard course offerings. The Department will consider suggestions by students for Special Topics courses, but it must be borne in mind that such a course should normally be approved at least three months before the start of the semester in which it is to be taken.
PR: permission of the Head of Department
4950 Technical Report on Geoscience Employment requires the preparation of a publication-quality technical report, about 50 pages in length, based on a study undertaken during geoscience employment. The topic and scope of the study must be approved by the Head of Department prior to its commencement. Students will present a seminar or seminars on results of the project, and will be closely advised on proper organization and writing of scientific reports. Some directed reading will be required.
PR: completion of 9 credit hours in Earth Sciences at 3000 level, and permission of the Head of Department
UL: can only be used as an "additional course" under point 3. of the regulations for General degrees, and under point 4. of the regulations for Honours degrees. The same study cannot be used as the basis of a dissertation completed for course EASC 499A/B.

499A and 499B Dissertation is an independent study with the subject decided in consultation with Faculty Advisors and approved in advance by the Head of Department. The first semester will involve background reading, field and/or laboratory work, a dissertation outline, and a draft of a first chapter of the thesis. The second semester will be devoted to data synthesis and interpretation, a mandatory seminar presenting study results, and a formal written thesis.
$\mathrm{CH}: 6$
PR: admission to the Honours program
UL: The dissertation cannot be based on the same study used to obtain credit for EASC 4950. May be used as Science credits by students not int the Honours program with permission of the Head of the Department.

### 12.6 Economics

For course descriptions, see Faculty of Humanities and Social Sciences section of the Calendar.

### 12.7 Geography

For course descriptions, see Faculty of Humanities and Social Sciences section of the Calendar.

### 12.8 Mathematics and Statistics

Students are encouraged to consult the Department regularly for specific planned offerings, semester by semester.
Placement in first-year mathematics courses at the St. John's Campus and online is based upon a student's pre-requisite level of proficiency in mathematics as demonstrated in a manner that is acceptable to the Department of Mathematics and Statistics. This may be through credit and grades earned in recognized high school or undergraduate mathematics courses or scores earned in the University's Mathematics Placement Test (MPT) or recognized standardized examinations such as International Baccalaureate (IB), Advanced Placement (AP), or the College Board's Subject Area Test in Mathematics Level I (SATM1) examinations.

For detailed information regarding mathematics pre-requisites and placement requirements, see the course descriptions below and refer to the mathematics and calculus placement information provided by the Department of Mathematics and Statistics at www.mun.ca/math. Students registering for first year mathematics courses at the Grenfell Campus should consult Grenfell Campus, Course Descriptions, Mathematics and Statistics for placement information.

### 12.8.1 Mathematics Courses

Pure and applied Mathematics courses are designated by MATH. Where the 4 digit course number is the same, students can receive credit for only one course with subject names MATH, AMAT, PMAT, STAT.

[^27]1000 Calculus I is an introduction to differential calculus, including algebraic, trigonometric, exponential, logarithmic, inverse trigonometric and hyperbolic functions. Applications include kinematics, related rates problems, curve sketching and optimization.
CR: the former MATH 1081
LC: 4
PR: MATH 1090 or 109B or a combination of placement test and high school Mathematics scores acceptable to the Department
UL: at most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit restrictions: Mathematics 1000, 1031, 1050, 1051, the former 1080, the former 1081, 1090, 109A/B, the former 1150 and 1151

1001 Calculus II is an introduction to integral calculus, including Riemann sums, techniques of integration and improper integrals. Applications include exponential growth and decay, areas between curves and volumes of solids of revolution.
PR: MATH 1000 or the former MATH 1081

## 1031 Mathematical Problem Solving - inactive course.

1050 Finite Mathematics I covers topics which include sets, logic, permutations, combinations and elementary probability.
CR: MATH 1052 and MATH 1053
LC: 4
PR: a combination of placement test and high school mathematics scores acceptable to the department or the former MATH 103F
UL: At most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit restrictions: Mathematics 1000, 1031, 1050, 1051, 1052, 1053, the former 1080, the former 1081, 1090, 109A/B, the former 1150 and 1151. Students who have already obtained 6 or more credit hours in Mathematics or Statistics courses numbered 2000 or above should not register for this course, and cannot receive credit for it.

1051 Finite Mathematics II covers topics which include elementary matrices, linear programming, elementary number theory, mathematical systems, and geometry.
CR: MATH 1052 and MATH 1053
LC: 4
PR: a combination of placement test and high school mathematics scores acceptable to the department or the former MATH 103F
UL: At most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit festrictions: Mathematics 1000, 1031, 1050, 1051, 1052, 1053, the former 1080, the former 1081, 1090, 109A/B, the former 1150 and 1151. Students who have already obtained 6 or more credit hours in Mathematics or Statistics courses numbered 2000 or above should not register for this course, and cannot receive credit for it.

1090 Algebra and Trigonometry provides students with the essential prerequisite elements for the study of an introductory course in calculus. Topics include algebra, functions and their graphs, exponential and logarithmic functions, trigonometry, polynomials, and rational functions.
CR: if previously completed or currently registered for MATH 1000, 1001, 109A/B, the former 1080, or the former 1081
LC: 4
PR: a combination of placement test and high school Mathematics scores acceptable to the Department, or the former MATH 103F
UL: at most 9 credit hours in Mathematics will be given for courses completed from the following list subject to normal credit restrictions: Mathematics 1000, 1031, 1050, 1051, the former 1080, the former 1081, 1090, 109A/B, the former 1150 and 1151
109A and 109B Introductory Algebra and Trigonometry is a twosemester course which provides students with the essential prerequisite elements for the study of an introductory course in calculus, at a slower pace than MATH 1090. Topics include algebra, functions and their graphs, exponential and logarithmic functions, trigonometry, polynomials, and rational functions
CR: if previously completed or currently registered for MATH 1000, 1001, 1090, the former 1080, or the former 1081
LC: 4
PR: a combination of placement test and high school Mathematics scores acceptable to the Department
2000 Calculus III is an introduction to infinite sequences and series, and to the differential and integral calculus of multivariate functions. Topics include tests for the convergence of infinite series, power series, Taylor and Maclaurin series, complex numbers including Euler's formula, partial differentiation, and double integrals in Cartesian and polar coordinates.
PR: MATH 1001
2050 Linear Algebra I includes the topics: Euclidean n-space, vector operations in 2- and 3-space, complex numbers, linear transformations on nspace, matrices, determinants, and systems of linear equations.

PR: A combination of placement test and high school Mathematics scores acceptable to the Department or 3 credit hours in first year
Mathematics courses

2051 Linear Algebra II includes the topics: real and complex vector spaces, basis, dimension, change of basis, eigenvectors, inner products, and diagonalization of Hermitian matrices.
PR: MATH 1000 and 2050

## 2075 Introduction to the History of Mathematics - inactive course.

2090 Mathematics of Finance covers the topics: simple and compound interest and discount, forces of interest and discount, equations of value, annuities and perpetuities, amortization schedules and sinking funds, bonds and other securities, contingent payments.
PR: MATH 1001
2091 Introduction to Actuarial Mathematics - inactive course.
2130 Technical Writing in Mathematics is a project oriented course combining mathematical investigation and technical writing. By using computer programming, graphical and typesetting tools, students will explore mathematical concepts and will produce technical reports of professional quality. The latter will combine elements of writing and graphics to convey technical ideas in a clear and concise manner.
PR: admission to Applied or Pure Mathematics major and MATH 1001 and (Computer Science 1510 or 1001 or 2001, or Engineering 1020; or permission of the Head of Department)

2260 Ordinary Differential Equations I examines direction fields, equations of first order and first degree, higher order linear equations, variation of parameters, methods of undetermined coefficients, Laplace transforms, systems of differential equations. Applications include vibratory motion, satellite and rocket motion, pursuit problems, population models and chemical kinetics.
CR: the former MATH 3260
PR: MATH 2000
2320 Discrete Mathematics covers basic concepts of mathematical reasoning: logic and quantifiers, methods of proof, sets and set operations, functions and relations, equivalence relations and partial orders, countable and uncountable sets. These concepts will be illustrated through the congruence and divisibility of integers, induction and recursion, principles of counting, permutations and combinations, the Binomial Theorem, and elementary probability.
CR: the former Computer Science 2740 or the former Engineering 3422 or Engineering 4424
PR: MATH 1001 or 2050
2330 Euclidean Geometry is an introduction to Euclidean geometry of the plane. It covers the geometry of triangles and circles, including results such as the Euler line, the nine-point circle and Ceva's theorem. It also includes straight-edge and compass constructions, isometries of the plane, the three reflections theorem, and inversions on circles.
CR: the former MATH 3330
PR: MATH 2051 or 2320
3000 Real Analysis I covers the structure of the real numbers, sequences and limits, compactness, continuity, uniform continuity, differentiation, and the Mean Value Theorem.
CR: the former MATH 2001
LH: 1.5
PR: MATH 2000 and 2320
3001 Real Analysis II examines Infinite series of constants, sequences and series of functions, uniform convergence and its consequences, power series, Taylor series, Weierstrass Approximation Theorem.
CR: the former MATH 3201
LH: 1
PR: MATH 3000
3100 Introduction to Dynamical Systems examines flows, stability, phase plane analysis, limit cycles, bifurcations, chaos, attractors, maps, fractals. Applications throughout.
CR: the former AMAT 3190
PR: MATH 2260 (or the former MATH 3260)
3111 Applied Complex Analysis examines mapping by elementary functions, conformal mapping, applications of conformal mapping, SchwartzChristoffel transformation, Poisson integral formula, poles and zeros, Laplace transforms and stability of systems, analytic continuation.
PR: MATH 3210
3132 Numerical Analysis I includes a discussion of round-off error, the solution of linear systems, iterative methods for nonlinear equations, interpolation and polynomial approximation, least squares approximation, fast Fourier transform, numerical differentiation and integration, and numerical methods for initial value problems.
CR: Computer Science 3731
LH: 1.5
PR: MATH 2000, MATH 2050, and a computing course (Computer Science 1510 is recommended)
3161 Ordinary Differential Equations II examines power series solutions,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
method of Frobenius, Bessel functions, Legendre polynomials and others from classical Physics, systems of linear first order equations, fundamental matrix solution, existence and uniqueness of solutions, and advanced topics in ordinary differential equations.
PR: MATH 2260 (or the former MATH 3260) and 3202
3202 Vector Calculus deals with functions of several variables, Lagrange multipliers, vector valued functions, directional derivatives, gradient, divergence, curl, transformations, Jacobians, inverse and implicit function theorems, multiple integration including change of variables using polar, cylindrical and spherical co-ordinates, Green's theorem, Stokes' theorem, divergence theorem, line integrals, arc length.
CR: Physics 3810
PR: MATH 2000 and 2050
3210 Introduction to Complex Analysis examines complex numbers, analytic functions of a complex variable, differentiation of complex functions and the Cauchy-Riemann equations, complex integration, Cauchy's theorem, Taylor and Laurent series, residue theory and applications.
PR: MATH 3000
3240 Applied Graph Theory examines algorithms and complexity, definitions and basic properties of graphs, Eulerian and Hamiltonian chains, shortest path problems, graph colouring, planarity, trees, network flows, with emphasis on applications including scheduling problems, tournaments, and facilities design.
CR: the former Computer Science 2741
PR: MATH 2320
3300 Set Theory is an introduction to Mathematical Logic, functions, equivalence relations, equipotence of sets, finite and infinite sets, countable and uncountable sets, Cantor's Theorem, Schroeder-Bernstein Theorem, ordered sets, introduction to cardinal and ordinal numbers, logical paradoxes, the axiom of choice.
PR: MATH 2320
3303 Introductory Geometric Topology covers graphs and the four colour problem, orientable and non-orientable surfaces, triangulation, Euler characteristic, classification and colouring of compact surfaces, basic pointset topology, the fundamental group, including the fundamental groups of surfaces, knots, and the Wirtinger presentation of the knot group.
PR: MATH 2320
3320 Abstract Algebra is an introduction to groups and group homomorphisms including cyclic groups, cosets, Lagrange's theorem, normal subgroups and quotient groups, introduction to rings and ring homomorphisms including ideals, prime and maximal ideals, quotient rings, integral domains and fields.
PR: MATH 2320

## 3321 Applied Algebra - inactive course.

3331 Projective Geometry includes course topics: projective space, the principle of duality, mappings in projective space, conics and quadrics. PR: MATH 2051

3340 Introductory Combinatorics includes topics: distributions, the binomial and multinomial theorems, Stirling numbers, recurrence relations, generating functions and the inclusion-exclusion principle. Emphasis will be on applications.
PR: MATH 2320
3370 Introductory Number Theory examines perfect numbers and primes, divisibility, Euclidean algorithm, greatest common divisors, primes and the unique factorization theorem, congruences, cryptography (secrecy systems), Euler-Fermat theorems, power residues, primitive roots, arithmetic functions, Diophantine equations, topics above in the setting of the Gaussian integers. PR: MATH 2320

4000 Lebesgue Integration includes a review of the Riemann integral, functions of bounded variation, null sets and Lebesgue measure, the Cantor set, measurable sets and functions, the Lebesgue integral in R1 and R2, Fatou's lemma, Monotone and Dominated Convergence Theorems, Fubini's Theorem, an introduction to Lebesgue-Stieltjes measure and integration.
CR: the former Pure Mathematics 4400
PR: MATH 3001
4001 Functional Analysis includes metric and normed spaces, completeness, examples of Banach spaces and complete metric spaces, bounded linear operators and their spectra, bounded linear functionals and conjugate spaces, the fundamental theorems for Banach spaces including the Hahn-Banach Theorem, topology including weak and weak* topologies, introduction to Hilbert spaces.
CR: the former Pure Mathematics 4302
PR: MATH 3001
4100 Applied Functional Analysis - inactive course.
4102 Stochastic Methods in Applied Mathematics - inactive course.
4130 Introduction to General Relativity (same as Physics 4220) studies
both the mathematical structure and physical content of Einstein's theory of gravity. Topics include the geometric formulation of special relativity, curved spacetimes, metrics, geodesics, causal structure, gravity as spacetime curvature, the weak-field limit, geometry outside a spherical star, Schwarzschild and Kerr black holes, Robertson-Walker cosmologies, gravitational waves, an instruction to tensor calculus, Einstein's equations,
and the stress-energy tensor.
CO: MATH 4230
CR: Physics 4220
PR: MATH 3202 and one of Physics 3220 or MATH 4230 or permission of the Head of Department.

4131 Numerical Linear Algebra - inactive course.
4132 Introduction to Optimization - inactive course.
4133 Numerical Optimization is numerical methods for functions of one variable, for functions of several variables including unrestricted search, sequential uniform search, irregular search, non-gradient methods, gradient methods with and without constraints, geometric programming, selection of other topics from dynamic programming, integer programming, etc., solution of applied problems by numerical optimization.
PR: MATH 4131, 4132

## 4140 Introduction to Mathematical Control Theory-inactive course.

4160 Partial Differential Equations I covers two point boundary value problems, Fourier series, Sturm-Liouville theory, canonical forms, classification and solution of linear second order partial differential equations in two independent variables, separation of variable, integral transform methods.
PR: MATH 2260 (or the former MATH 3260) and 3202
4161 Integral Equations - inactive course.
4162 Numerical Methods for Differential Equations covers numerical solution of initial value problems for ordinary differential equations by single and multi-step methods, Runge-Kutta, and predictor-corrector; numerical solution of boundary value problems for ordinary differential equations by shooting methods, finite differences and spectral methods; numerical solution of partial differential equations by the method of lines, finite differences, finite volumes and finite elements.
PR: MATH 3132 and 4160
4170 Partial Differential Equations II covers first order equations, Cauchy problems, Cauchy-Kowalewska theorem, second order equations, canonical forms, wave equations in higher dimensions, method of spherical means, Duhamel's principle, potential equation, Dirichlet and Neuman problem, Green's function and fundamental solution, potential theory, heat equation, Riemann's method of integration, method of plane and Riemann waves for systems of PDEs of the first order.
PR: MATH 4160
4180 Introduction to Fluid Dynamics (same as Physics 4205) covers basic observations, mass conservation, vorticity, stress, hydrostatics, rate of strain, momentum conservation (Navier-Stokes equation), simple viscous and inviscid flows, Reynolds number, boundary layers, Bernoulli's and Kelvin's theorems, potential flows, water waves, thermodynamics.
CR: Physics 4205
PR: Physics 3220 and either MATH 4160 or the former Physics 3821
4190 Mathematical Modelling is intended to develop students' skills in mathematical modelling and competence in oral and written presentations. Case studies in modelling will be analysed. Students will develop a mathematical model and present it in both oral and report form.
PR: MATH 3100, 3161, 4160, and a technical writing course offered by a Science department (MATH 2130 is recommended).

419A and 419B Applied Mathematics Honours Project is a two-semester course that requires the student, with supervision by a member of the Department, to prepare a dissertation in an area of Applied Mathematics. In addition to a written project, a one hour presentation will be given by the student at the end of the second semester.
CH: 6
CR: the former AMAT 4199
PR: registration in an Honours or Joint Honours program in Applied Mathematics.

4230 Differential Geometry covers both classical and modern differential geometry. It begins with the classical theory of curves and surfaces, including the Frenet-Serret relations, the fundamental theorem of space curves, curves on surfaces, the metric, the extrinsic curvature operator and Gaussian curvature. The modern section studies differentiable manifolds, tangent vectors as directional derivatives, one-forms and other tensors, the metric tensor, geodesics, connections and parallel transport, Riemann curvature and the Gauss-Codazzi equations.
PR: MATH 3202
4240 Differential and Integral Calculus on Manifolds - inactive course.
4252 Quantum Information and Computing (same as Physics 4852)

[^28]covers postulates of quantum mechanics, matrix theory, density matrices, qubits, qubit registers, entanglement, quantum gates, superdense coding, quantum teleportation, quantum algorithms, open systems, decoherence, physical realization of quantum computers.
CR: Physics 4852
PR: MATH 2051 or Physics 3820
4280-4289 Special Topics in Pure and Applied Mathematics will have the topics to be studied announced by the Department. Consult the Department for a list of titles and information regarding availability.
PR: permission of the Head of the Department
4300 General Topology is an introduction to point-set topology, centering on the notions of the topological space and the continuous function. Topological properties such as Hausdorff, compactness, connectedness, normality, regularity and path-connectedness are examined, as are Urysohn's metrization theorem and the Tychonoff theorem.
PR: MATH 3300 or 3000

## 4301 Algebraic Topology - inactive course.

4310 Complex Function Theory examines topology of C, analytic functions, Cauchy's theorem with proof, Cauchy integral formula, singularities, argument principle, Rouche's theorem, maximum modulus principle, Schwarz's lemma, harmonic functions, Poisson integral formula, analytic continuation, entire functions, gamma function, Riemann-Zeta function, conformal mapping.
PR: MATH 3210
4320 Ring Theory examines factorization in integral domains, structure of finitely generated modules over a principal ideal domain with application to Abelian groups, nilpotent ideals and idempotents, chain conditions, the Wedderburn-Artin theorem.
PR: MATH 3320
4321 Group Theory examines permutation groups, Sylow theorems, normal series, solvable groups, solvability of polynomials by radicals, introduction to group representations.
PR: MATH 3320
4331 Galois Theory - inactive course.
4340 Combinatorial Analysis continues most of the topics started in 3340 with further work on distributions, recurrence relations and generating functions. Generating functions are used to solve recurrence relations in two variables. Also included is a study of Polya's theorem with applications.
PR: MATH 2000 and 3340
4341 Combinatorial Designs includes the study of finite fields, Latin squares, finite projective planes and balanced incomplete block designs. PR: MATH 3320 or 3340
4370 Number Theory is continued fractions, an introduction to Diophantine approximations, selected Diophantine equations, the Dirichlet product of arithmetic functions, the quadratic reciprocity law, and factorization in quadratic domains.
PR: MATH 3370

## 4375 History of Mathematics -inactive course.

439A and 439B Pure Mathematics Honours Project is a two-semester course that requires the student, with supervision by a member of the Department, to prepare a dissertation in an area of Pure Mathematics. Although original research by the student will not normally be expected, the student must show an ability and interest to learn and organize material independently. A one-hour presentation will be given by the student at the end of the second semester-
CH: 6
CR: the former MATH 4399
PR: registration in an Honours or Joint Honoûrs program in Pure
Mathematics

### 12.8.2 Statistics Courses

Statistics courses are designated by STAT. Where the 4 digit course number is the same, students can receive credit for only one course with subject names MATH, AMAT, PMAT, STAT.
1510 Statistical Thinking and Concepts examines the basic statistical issues encountered in everyday life, such as data collection (both primary and secondary), ethical issues, planning and conducting statisticallydesigned experiments, understanding the measurement process, data summarization, measures of central tendency and dispersion, basic concepts of probability, discrete probability models, understanding sampling distributions, the central limit theorem based on simulations (without proof), linear regression, concepts of confidence intervals and testing of hypotheses. Statistical software will be used to demonstrate each technique. CO: Mathematics 1000
CR: cannot receive credit for STAT 1510 if completed with, or subsequent to, STAT 2500, 2550 or the former 2510

LH: one 90 minute lab per week
2410 Introduction to Probability Theory covers combinatorial analysis, axioms of probability, conditional probability, independence, random variables, distribution function, mathematical expectation, Chebyshev's inequality, joint distribution of two random variables, binomial and related distributions, Poisson, gamma, beta, normal, student $t$ and $F$ distributions, functions of random variables, convergence in probability, convergence in distribution, central limit theorem.
CR: STAT 3410
OR: one 90 minute tutorial period per week
PR: MATH 2000
2500 Statistics for Business and Arts Students covers descriptive statistics (including histograms, stem-and-leaf plots and box plots), elementary probability, random variables, the binomial distribution, the normal distribution, sampling distribution, estimation and hypothesis testing including both one and two sample tests, paired comparisons, correlation and regression, related applications.
CR: STAT 2550, the former 2510, Psychology 2910, 2925 and the former 2900
LH: one 90 minute lab per week. Statistical computer package will be used in the laboratory, but no prior computing experience is assumed
PR: Mathematics 1000 or 6 credit hours in first year courses in Mathematics or registration in at least semester three of a Bachelor of Nursing program or permission of the Head of Department

## 2501 Further Statistics for Business and Arts Students covers power

 calculation and sample size determination, analysis of variance, multiple regression, nonparametrie statistics, time series analysis, introduction to sampling techniques.CR: STAT 2560, Psychology 2911, 2950, and the former 2901
LH: one 90 minute lab per week. Statistical computer package will be used in the laboratory.
PR: STAT 2500 or the former 2510
2550 Statistics for Science Students is an introduction to basic statistics methods with an emphasis on applications to the sciences. Material includes descriptive statistics, elementary probability, binomial distribution, Poisson distribution, normal distribution, sampling distribution, estimation and hypothesis testing (both one and two sample cases), chi-square test, one way analysis of variance, correlation and simple linear regression.
CR: Engineering 4421, STAT 2500, the former STAT 2510, Psychology 2910, Psychology 2925, and the former Psychology 2900
LH: one 90 minute lab per week. Statistical computer package will be used in the laboratory, but no prior computing experience is assumed. PR: Mathematics 1000 or the former 1081
2560 Further Statistics for Science Students (formerly STAT 2511) covers estimation and hypothesis testing in the two-sample and paired sample cases, one way and two way analysis of variance, simple and multiple linear regression, chi-square tests, non-parametric tests including sign test, Wilcoxon signed rank test and Wilcoxon rank test.
CR: STAT 2501, Psychology 2911, 2950, and the former 2901
LH: one 90 minute lab per week. Statistical computer packages will be
used in the laboratory, but no prior computing experienced is assumed.
PR: STAT 2500 or 2550, Mathematics 1000
3411 Statistical Inference I examines sampling distributions, order statistics, confidence interval, hypotheses testing, chi-square tests, maximum likelihood estimation, maximum likelihood estimation, Rao-Cramér inequality and efficiency, maximum likelihood tests, sufficiency, completeness and uniqueness, exponential class of distributions, likelihood ratio test and Neyman-Pearson lemma.
OR: one and a half hour tutorial period weekly
PR: STAT 2410 or 3410
3520 Experimental Design I is an introduction to basic concepts in experimental design, including principles of experimentation; single factor designs such as completely randomized designs; randomized block designs; Latin square designs; Graeco Latin square designs; multiple comparison tests; analysis of covariance; balanced incomplete block designs; factorial designs; fixed, random and mixed effects models.
CR: Psychology 3900 and 3950
PR: Mathematics 2050 and either STAT 3411 or both Mathematics 1001 and one of STAT 2501 or 2560 or the former 2511

3521 Regression covers inferences in linear regression analysis including estimation, confidence and prediction intervals, hypotheses testing and simultaneous inference; matrix approach to regression analysis, multiple linear regression, multicollinearity, model building and selection, polynomial regression, qualitative predictor variables.
PR: Mathematics 2050 and either STAT 3411 or both Mathematics 1001 and one of STAT 2501 or 2560 or the former 2511

3540 Time Series I is an introduction to basic concepts of time series analysis such as stationarity and nonstationarity, components of time series, transformation of nonstationary series using regression, decomposition methods and differencing, autocovariance and autocorrelation functions,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).
moving average (MA), autoregressive (AR), and ARMA representation of stationary time series including stationarity and invertibility conditions; partial autocorrelation function; properties of $\mathrm{MA}(\mathrm{q}), \operatorname{AR}(\mathrm{p})$ and $\operatorname{ARMA}(\mathrm{p}, \mathrm{q})$ models, model identification, parameter estimation, model diagnostics and selection, forecasting, integrated ARMA process. Applications to real time series.
PR: either STAT 3411 or both Mathematics 1001 and one of STAT 2501 or
2560 or the former 2511
3570 Reliability and Quality Control covers an introduction to reliability, parallel and series systems, standard parametric models, estimation of reliability, quality management systems, introduction to statistical process control, simple quality control tools, process control charts for variables and attributes, process capability, cumulative sum chart, exponentially weighted moving average chart, acceptance sampling plans, measurement system analysis, continuous improvement and six sigma methodology.
PR: either STAT 3411 or both Mathematics 1001 and one of STAT 2501 or 2560 or the former 2511

3585 Computational Statistics is an introduction to modern computational statistics, using a programming language which implements S. Emphasis will be placed on the development of programs for numerical and graphical exploratory data analysis and for implementing specialized statistical procedures.

## PR: Mathematics 2000, STAT 2560

4402 Stochastic Processes covers the Poisson process, renewal theory, Markov chains, and some continuous state models including Brownian motion. Applications are considered in queuing, reliability, and inventory theory. Emphasis is on model building and probabilistic reasoning.
CR: Mathematics 4102
PR: STAT 2410 or 3410
4410 Statistical Inference II covers decision theory, uniformly minimum variance estimators, sufficiency and completeness, likelihood theory and maximum likelihood estimation, other estimation methods including best linear unbiased estimation, estimating equations and Bayesian estimation, hypothesis testing and interval estimation, and applications of statistical inference methods under regression models and analysis of variance models.
PR: Mathematics 2051, STAT 3411
4520 Experimental Design II is an introduction to factorial experiments including mixed effects models, unbalanced data in factorial designs, two level and three level factorial experiments, blocking and confounding in factorial designs, fractional factorial experiments, unreplicated factorial experiments, response surface designs, robust parameter designs, nested and split plot designs.
PR: STAT 3520
4530 Survey Sampling covers basic concepts, simple random sampling, unequal probability sampling and the Horvitz-Thompson principle, sufficiency, design and modelling in sampling, ratio and regression estimators, stratified and cluster sampling, methods for elusive and/or hard-to-detect populations.
PR: STAT 3411
4540 Time Series examines the analysis of time series in the time domain and is an introduction to frequency domain analysis. Topics covered include integrated ARMA processes, seasonal time series models, intervention analysis and outlier detection, transfer function models, time series regression and GARCH models, vector time series models, state space models and the Kalman Filter. Spectral decomposition of a time series is introduced. Emphasis is on applications and examples with a statistical software package.
PR: STAT 3411 and 3540
4550 Non-parametric Statistics covers inferences concerning location based on one sample, paired samples or two samples, inferences concerning scale parameters, goodness-of-fit tests, association analysis, PR: one of STAT 3520 or 3521 or STAT 3411
4560 Continuous Multivariate Analysis examines the multivariate normal distribution and its marginal and conditional distributions, distributions of non-singular and singular linear combinations, outline of the Wishart distribution and its application, in particular, to Hotelling's T-squared statistic for the mean vector, connection between likelihood ratio and Hotelling's Tsquared statistics, a selection of techniques chosen from among MANOVA, multivariate regression, principal components, factor analysis, discrimination and classification, clustering.
PR: Mathematics 2051, STAT 2410 or 3410, and one of STAT 3411, 3520, or 3521
4561 Categorical Data Analysis is an analysis of cross-classified categorical data with or without explanatory variables, chi-square test, measures of association, multidimensional contingency tables, hypotheses of partial and conditional independence, log-linear models for Poisson, multinomial and product-multinomial sampling schemes, concept of ordinal categorical models, logit models, likelihood estimation, selection of suitable log-linear and logit models.

PR: STAT 3520 or 3521
4581 Quantitative Methods in Biology - inactive course.
4590 Statistical Analysis of Data I examines the statistical analysis of real life univariate data using computational and statistical methods including descriptive statistics, chi-square tests, non-parametric tests, analysis of variance, linear, logistic and log-linear regressions. Other statistical techniques such as integrated autoregressive moving average modelling and forecasting or quality control methods may be introduced depending on the nature of the data.
LH: one 90 minute lab per week
PR: one of STAT 3520, 3521 or 3540
459A and 459B Statistics Honours Project is a two-semester course that requires the student, with supervision by a member of the Department, to prepare a dissertation in an area of Statistics. In addition to a written project, a presentation will be given by the student at the end of the second semester.
CH: 6
CR: the former STAT 4599
PR: registration in an Honours or Joint Honours program in Statistics

### 12.9 Ocean Sciences

Ocean Sciences coursês are designated by OCSC.
1000 Exploration of the World Ocean is an introductory course covering the major ocean sciences (biology, chemistry, geology, physics) at a level sufficient for science majors but accessible to non-science majors. It explores phenomena occurring from the shoreline to the abyss and from equatorial to polar regions. It also examines principles of marine ecology as well as how the marine environment affects humans and vice versa. The course is offered in a blended format that combines face-to-face lectures and online interactive activities in the form of virtual oceanographic expeditions.
LC. 1.5 hours per week
OR: 1.5 hours per week (online interactive activities)
2000 Introductory Biological Oceanography provides a general understanding of the biological processes that occur in coastal and oceanic environments. It introduces students to the major groups of bacteria, phytoplankton, invertebrates and fish, emphasizing the biotic and abiotic factors controlling primary production and marine biomass. It shows how the physical, chemical, and geological environments interact with biology to define processes and patterns affecting nutrients and life in marine ecosystems.
CR: Biology 3710
PR: OCSC 1000 and a 1000-level course in one of Biology, Chemistry, Earth Sciences or Physics
2001 Introduction to Sustainable Fisheries and Aquaculture introduces students to the breadth of aquaculture and fisheries science and the variety of animal species cultured and harvested. Basic aspects of aquaculture and fisheries and the links between the two are covered, including production systems, capture fisheries, environmental interactions, and the physiology, ecology and reproduction of finfish and shellfish in the context of their culture and harvest.
PR: OCSC 1000 or Biology 1002
2100 Introductory Chemical Oceanography (same as Chemistry 2610) provides an introduction to the fundamental chemical properties of seawater and the processes governing the concentrations of elements and compounds in the oceans. It is an introduction to the sources, distribution, and transformations of chemical constituents of the ocean, and their relation to biological, chemical, geological, and physical processes. Topics include: controls on average concentration of chemicals in the ocean; vertical and horizontal distributions of ocean constituents; air-sea interactions; production, export, and remineralization of organic matter; the ocean carbon cycle; human-induced changes; stable isotopes; and trace elements.
CR: Chemistry 2610
PR: the former CHEM 1011 or 1051 or 1001 which may be taken concurrently
2200 Introductory Geological Oceanography (same as Earth Sciences 2919) is a study of the formation and evolution of oceans, including plate tectonics, mid-ocean ridges (birth place of oceans), subduction zones (where oceans are consumed), sedimentary environments such as estuaries, deltas, beaches and barrier islands, continental shelves, slopes and deep abyssal plains and special topics, including anoxic events, evolution of tides, atmosphere-ocean interactions, formation of banded iron formations, snowball Earth, black and white smokers, and how Earth modulates its climate through atmosphere, hydrosphere, biosphere and lithosphere interactions.
CR: Earth Sciences 2919
PR: Earth Sciences 1000 with a grade of at least $55 \%$
2300 Introductory Physical Oceanography (same as Physics 2300) provides an introduction to general oceanography with a primary focus on
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).
physical oceanography. Topics include how oceans form and evolve on a planetary scale. Ocean characteristics studied include: the properties of seawater; elementary dynamics of fluids on the rotating Earth; ocean circulation; wind-forcing in the ocean; tides and waves. Contemporary methods used in oceanographic study are covered including satellite oceanography. Interactions that occur between physical and chemical processes and biological activity are reviewed.
CR: Environmental Science 2371, Physics 2300
PR: 6 credit hours in any first-year courses in Physics
2500 Introduction to Practical Ocean Sciences explores the instruments, techniques and analytical methods commonly used to study marine life and processes, chiefly focusing on the interaction between living organisms and their chemical, physical and geological environment. The course combines ship-based or shore-based sampling and data collection with laboratory investigation in an intensive 2 -week long format. It is primarily intended for mid-level undergraduate students majoring in Ocean Sciences or Marine Biology. This course will either be offered during a special session following the Winter semester, or in the Spring semester.
AR: attendance is required. Failure to attend may result in a failing grade or withdrawal from the course.
PR: Science 1807 and Science 1808; OCSC 1000, and at least three of OCSC 2000 (or Biology 3710), 2001, 2100, 2200, 2300
3000 Aquaculture Principles and Practices emphasizes the techniques and methods used to culture finfish and shellfish, with a primary focus on Canadian aquaculture species. Basic aspects of aquaculture will be covered, including the design and maintenance of production systems, culture techniques, and the nutrition, health, physiology and reproduction of finfish and shellfish. The laboratory portion of this course will provide students with practical experience in the maintenance of land-based aquaculture production systems and in the husbandry/culture of aquatic organisms.
LH: 3

## PR: OCSC 2001, or OCSC 1000 and Biology 1002

3002 Aquaculture and Fisheries Biotechnology is an introduction to biotechnology and genetics as they are applied to aquaculture and fisheries. Topics covered include genetic variation; genetic structure of fish and shellfish populations; the genetic basis of aquaculture traits; finfish and shellfish genomic research; marker-assisted selection in aquaculture; manipulation of ploidy; genetic engineering in aquaculture; and techniques used to study the responses of aquatic animals to external stressors such as hypoxia, temperature stress, acidification, and pathogens.
PR: Biology 2250 or Biochemistry 2100
3600 Marine Microbiology provides an overview of microbial activity in the ocean, both in natural and applied settings. The focus is on interactions between microorganisms and other biota, ranging from deep-sea vent invertebrates to commercially cultured fish species. Prospective topics include effluent discharge, water quality, bacterial metabolism and nutrient cycles, bacteria-virus and bacteria-host interactions (including symbioses and pathogenesis), and marine microbial biotechnology.
PR: Biology 2250 or Biochemistry 2100
3640 Environmental Physiology of Animals (same as Biology 3640) covers physiological adaptations of animals facilitating their survival in natural environments with emphasis on physiological and biochemical responses of animals to extreme environments. Starting with the fundamental basis of physiological mechanisms, the course explores various aspects and the integration of major physiological processes (metabolism, respiration, osmoregulation) and how these relate to ecological niche.
CR: the former Biology 3403 or the former Biology 4455, Biology 3640
PR: Biology 2060; Biochemistry 3106 or 3206
UL: may not be used to fulfill the physiology course requirement for a Biology major, honours or joint honours program
4000 Scientific Diving Methods is an in-depth study and application of methods routinely employed for data collection in underwater scientific research. Aspects covered include habitat mapping; installation and use of instrumentation; still and video camera techniques; planning and execution of surveys and experiments in major subtidal habitats; as well as data analysis and interpretation. Participants are trained in accordance with Memorial University of Newfoundland's Guide for Diving Safety and the Canadian Association for Underwater Science (CAUS) standards to meet the criteria for Scientific Diver I rating. This course is normally offered at the Bonne Bay Marine Station in a special 2 -week session at the beginning or end of the Spring semester depending on station's availability.
OR: The following documentation must be provided to the course instructor at least four months before the first day of the course. It must be in effect until at least the last day of the course. Submission of this documentation does not guarantee acceptance into the course. Aside from course prerequisites, acceptance will be based on successful completion, before the course begins, of a diving fitness and skills evaluation in a pool environment and demonstration of understanding of the MUN Diving Safety Manual, physics and physiology of diving, and use of recreational dive tables. Nationally recognized scuba diver certification with diver rescue and accident management techniques; diver medical examination by a licensed physician knowledgeable in
diving medicine; First Aid (basic), CPR (basic), and DAN oxygen first aid for scuba diving injuries administration cards; DAN membership and insurance or medical insurance covering hyperbaric treatment; diver's log book with at least 12 dives in the last 12 months including one dive in the last six months and four dives in cold $\left(<10^{\circ} \mathrm{C}\right)$ water; cold-water scuba diving equipment complete with proper hydrostatic/ VIP service tags on diving cylinders and overhaul/service receipts on regulators and buoyancy compensator devices.
PR: Biology 2122 or Biology 3709, Biology 2600 or OCSC 2000 or Environmental Science 2371, Statistics 2550 or equivalent
4100 Marine Pelagic Food Webs examines the structure, function and dynamics of pelagic food webs in the marine environment. The course will focus on the material and energy flows within and among trophic levels and the interactions with major biogeochemical cycles and climate.
PR: Biology 1002 or 2120, and OCSC 2000 or Biology 3710
4122 Advanced Studies in Marine Animal Diversity (same as Biology 4122) provides an in-depth examination of cellular, physiological, behavioural and ecological adaptations in marine animals, Lectures will be combined with discussions of relevant papers from the primary literature on topics of current interest which may relate morphology, ecology, evolution, natural history, species interactions and practical applications. Students will also gain hands-on experience by designing and conducting research projects involving live or preserved animals.
CR: Biology 4122
LC: either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time
LH: either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; Biology 2122 and Biology 2600
4200 Marine Omics provides an overview of marine genomics, transcriptomics, proteomics, glycomics, metabolomics, and lipidomics. Omics-based studies of a variety of marine organisms (e.g. fungi, algae, animals), as well as several industrial applications (e.g. biofuel, nutrigenomics, pharmacogenomics, aquaculture and fisheries), will be considered.
PR: OCSC 1000 and Biology 2250 (or Biochemistry 2100), or OCSC 3002
4300 Climate Change and Global Marine Fisheries Dynamics explores the effects of ocean-atmosphere dynamics on large scale marine ecosystem domains, with a special focus on assessing the impact of anticipated climate change on global fisheries production. The course uses a blend of lectures and computer simulation laboratories to familiarize students with current research on fisheries and climate change.
LH: 3
PR: OCSC 1000, 2000 (or Biology 3710) and 2001
4400 Deep-Sea Ecology provides an overview of the physical and chemical environment of the deep sea, including hydrothermal vents and seeps, to explore adaptations in deep-sea organisms and biodiversity in this key oceanic system. The course combines lectures, seminars, discussions and computer-based laboratory tools, such as dive logs from remotely operated vehicles and data from underwater cabled observatories. It introduces students to emerging research, cutting-edge technologies, as well as natural and human impacts in the deep sea.
LH: 3
PR: OCSC 2500 and at least one course in Ocean Sciences at the 3000 or 4000 level
4601 Functional Biology of Fish (same as Biology 4601) is an introduction to anatomical, physiological and cellular processes in the life cycle of fishes.
CR: Biology 4601
PR: Biology 2060, Biology 2210 or 3202, and Biology 3401 or 3640
4910-4919 Special Topics in Ocean Biogeochemistry are advanced courses for senior undergraduate students that cover one or several subjects related to environmental changes and the flow of major elements in marine systems.
PR: to be determined at the time of offer
4920-4929 Special Topics in Marine Ecology are advanced courses for senior undergraduate students that cover one or several subjects related to evolutionary and ecological principles at the organisimal and ecosystem levels in marine systems.
PR: to be determined at the time of offer
4930-4939 Special Topics in Experimental Marine Biology are advanced courses for senior undergraduate students that cover one or several subjects related to research in marine biology, such as field and laboratory experimental design, data analysis and modeling.
PR: to be determined at the time of offer
4940-4949 Special Topics in Applied Ocean Sciences are advanced courses for senior undergraduate students that cover one or several subjects of special interest in applied fields of ocean sciences, such as fisheries, conservation, aquaculture, and biotechnology.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR $=$ Prerequisite(s); UL = Usage limitation(s).

## PR: to be determined at the time of offer

499A/B Honours Dissertation is a two-semester linked course based on independent research conducted under the supervision of an academic supervisor, who is normally a faculty member of the Department of Ocean Sciences. This dissertation is mandatory for students pursuing the Honours in Ocean Sciences. It can also be used towards the requirements of the Joint Honours in Marine Biology. A grade of PAS in 499A is required to proceed to 499B. The final written dissertation is normally submitted before the end of the tenth week of the second semester and an oral presentation of the completed research is delivered before the end of the semester. CH: 6
PR: Honours students in their final year or permission of the Head of the Department; Science 1807 and Science 1808

### 12.10 Physics and Physical Oceanography

Physics courses are designated by PHYS.
1020 Introductory Physics I is an algebra-based introduction to Newtonian mechanics. Topics covered include motion in one and two dimensions, Newton's laws, momentum, energy and work, and rotational motion.
Previous exposure to physics would be an asset but is not essential.
CO: Mathematics 1090 or 109A
CR: PHYS 1050
LH: 3; six laboratory sessions per semester
OR: tutorial sessions may be held on weeks when no laboratory is scheduled
PR: Level III Advanced Mathematics or Mathematics 1090 or 109A, Science 1807 and Science 1808. It is recommended that students have completed at least one of level II and level III high school physics courses

1021 Introductory Physics II is an algebra-based introduction to oscillations, fluids, wave motion, electricity and magnetism, and circuits.
LH: 3; normally there will be six laboratory sessions per semester
OR: tutorial sessions may be held on weeks when no laboratory is scheduled
PR: PHYS 1020 or 1050, Mathematics 1090 or 109A or 1000, Science 1807 and Science 1808

1050 General Physics I: Mechanics is a calculus-based introduction to mechanics. The course emphasizes problem solving, beginning with a review of vectors and one-dimensional kinematics. The main part of the course covers motion in two dimensions, forces and Newton's Laws, energy, momentum, rotational motion and torque, and finally oscillations. For details regarding recommendations for students taking PHYS 1050, see Note 4 under Physics and Physical Oceanography.

## CO: Mathematics 1000

CR: PHYS 1020
LH: 3
PR: Mathematics 1000, Science 1807 and Science 1808
1051 General Physics II: Oscillations, Waves, Electromagnetism is a calculus-based introduction to oscillations, wave motion, and electromagnetism. Topics include: simple harmonic motion; travelling waves, sound waves, and standing waves; electric fields and potentials; magnetic forces and fields; electric current and resistance; and electromagnetic waves.
CO: Mathematics 1001
LH: 3
PR: PHYS 1050, or 1021, or 1020 (with a minimum grade of $70 \%$ ),
Mathematics 1001, Science 1807 and Science 1808
2053 Fluids and Thermodynamics introduces the student to basic concepts in fluid statics and dynamics as well as the fundamental concepts in thermal physics: kinetic theory, the laws of thermodynamics, thermodynamic processes, entropy, and heat engines and refrigerators.
CO: Mathematics 1001 and PHYS 1051 (or PHYS 1021 with a minimum
gra
3
PR: Mathematics 1001 and PHYS 1051 (or PHYS 1021 with a minimum grade of $70 \%$ ), Science 4807 and Science 1808
2055 Electricity and Magnetism builds upon the concepts of electric and
magnetic forces and fields, Gauss's Law, electric potential and electromagnetic induction introduced in PHYS 1051, expanding them to introduce capacitance, their application in DC and AC circuits, electromagnetic waves, wave optics, and geometric optics.
CO: Mathematics 2000
LH: 3
PR: Mathematics 2000, PHYS 1051, Science 1807 and Science 1808
2151 Stellar Astronomy and Astrophysics introduces concepts in modern astronomy including: the celestial sphere, eclipses, parallax, and Kepler's laws; radiation; the Sun; spectroscopy; telescopes, resolution, and detectors; magnitudes, spectral classifications, and the Hertzsprung-Russell
diagram; the interstellar medium, star formation, stellar evolution, nucleosynthesis, white dwarfs, neutron stars, pulsars, nebulae, supernovae, black holes, and gamma-ray bursts; galaxies, dark matter, and active galactic nuclei; cosmology, the cosmic microwave background, inflation and dark energy; and the search for extraterrestrial intelligence.
PR: 6 credit hours in Mathematics courses at the first year level
2300 Introductory Physical Oceanography (same as Ocean Sciences 2300) provides an introduction to general oceanography with a primary focus on physical oceanography. Topics include how oceans form and evolve on a planetary scale. Ocean characteristics studied include: the properties of seawater; elementary dynamics of fluids on the rotating Earth; ocean circulation; wind-forcing in the ocean; tides and waves. Contemporary methods used in oceanographic study are covered including satellite oceanography. Interactions that occur between physical and chemical processes and biological activity are reviewed.
CR: Environmental Science 2371, Ocean Sciences 2300
PR: 6 credit hours in any first-year courses in Physics
2750 Modern Physics explores the fundamental ideas that are still driving technological developments. Einstein's theory of special relativity, and the microscopic world described by quantum physics are introduced through crucial historical observations. The course covers the dual nature of light and particles, quantum well and quantum tunneling phenomena, which play a key role in modem electronics. Atomic and nuclear structure, and elementary particles are also described.
CO: Mathematics 1001; PHYS 1051
CR: PHYS 2056
PR: Mathematics 1001; PHYS 1051 (or PHYS 1021 with a minimum grade of $70 \%$ )

2820 Computational Mechanics introduces computational methods in the context of Newtonian mechanics. Numerical differentiation and integration, numerical solutions to differential equations and data analysis are applied to projectile motion, N-body systems, oscillations and problems from astrophysics and geophysics. Implementation of numerical methods using computer programming is emphasized.
CO: Mathematics 2000
LH: 2
PR: Mathematics 2000 and PHYS 1051
3000 Physics of Device Materials is an introduction to the physics of materials, particularly group IV and III-V semiconductors, used in common technological devices. It covers fundamental concepts including structures of crystalline solids, quantum mechanics and statistical mechanics of charge carriers, equilibrium charge carrier concentrations, carrier transport and excess carrier phenomena. These concepts are applied to multi-material devices including pn and metal-semiconductor junctions, metal-oxidesemiconductor field-effect transistors, photovoltaic devices, light-emitting diodes, and solid-state lasers.
PR: PHYS 1051
3050 Introduction to Biophysics focuses on theoretical and computational modeling of biological processes using tools and concepts from physics, including the statistical physics of polymers, electrostatics of aqueous solutions, free energy minimization, energy-entropy competition, random walks, diffusion, the Einstein relation and depletion forces. With these tools the course examines the physics of biological processes such as osmotic pressure in cells, folding and cooperativity of macromolecules, ligandreceptor binding, energy balance of the cell, cell membrane shapes, ion channels, and molecular motors.
PR: one of Computer Science 1510 or 1001 or PHYS 2820, and one of
PHYS 2053 or Chemistry 2301
3150 Astrophysics I covers macroscopic and microscopic physics related to stellar structure, energy production, and evolution. This includes stellar observables, gravity and other forces, the Virial Theorem, light and matter in stars, stellar spectra and classification, Hertzsprung-Russell diagrams and properties of main sequence dwarf stars, radiation in the stellar atmosphere, structural relationships and stellar models, energy sources and energy transport in stars, star formation and stellar evolution, nucleosynthesis, variable stars, Chandrasekhar's limit, and degenerate remnants.
CR: PHYS 3160
PR: PHYS 2053, 2750 (or 2056), and 2820
3151 Astrophysics II deals with galactic and cosmological scale astrophysics. Topics include: galaxies including Hubble classification, dark matter, and structure of the Milky Way Galaxy; globular and open star clusters; compact objects including compact binary systems, novas and supernovas, pulsars and magnetars, X-ray binaries; black holes, active galactic nuclei, quasars, the Lyman forest, and the Gunn-Peterson trough; and cosmology including the cosmic microwave background, the FLRW metric, the Friedmann equations, cosmological expansion, and dark energy.

CR: PHYS 3160
PR: PHYS 3150 and 3220
3220 Classical Mechanics I covers vector operations, coordinate transformations, derivative of vectors, Newton's laws, differential equations, kinematics and dynamics of a particle, linear and quadratic air resistance,
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
terminal velocity, momentum of a time varying mass, center of mass systems, angular momentum, moment of inertia, energy, work-energy theorem, forces as the gradient of potential energy, time dependent potential energy, curvilinear one-dimensional systems, energy of a multiparticle system, calculus of variations, and Lagrangian Dynamics.
CO: PHYS 2820, Mathematics 2260 and 3202
PR: PHYS 2820, Mathematics 2260 and 3202
3230 Classical Mechanics II covers noninertial frames of reference, Newton's second law in a rotating frame, centrifugal force, Coriolis force, motion of rigid bodies, center of mass, rotation about a fixed axis, rotation about any axis, inertia tensor, Euler's equations with zero torque, coupled oscillators, chaos theory, bifurcation diagrams, state-space orbits, Poincare sections, Hamiltonian dynamics, ignorable coordinate, phase-space orbits, Liouville's theorem, scattering angle, impact parameter, differential scattering cross section, and Rutherford scattering.
CO: Mathematics 3202
PR: PHYS 3220, Mathematics 2260 and 3202
3300 Intermediate Physical Oceanography provides a physics-based introduction to both dynamical and descriptive physical oceanography. Topics include properties of seawater, geostrophy, conservation equations, wind-forced dynamics, large-scale ocean circulation and waves and tides. A survey of analytical, observational, numerical, and laboratory approaches is presented.
PR: PHYS 2053 and Mathematics 2000 or registration in Academic Term 5 of the Ocean and Naval Architectural Engineering program

3340 Principles of Environmental Physics applies basic physical principles to the environment of the Earth with a focus on problem solving and developing physical understanding. Key topics to be covered include the climate system and climate change, energy production and use, and the role of science in guiding public decision-making.
PR: Mathematics 2000 and PHYS 2053
3400 Thermal Physics covers central concepts in thermodynamics and statistical mechanics, including temperature, entropy, the laws of thermodynamics, the Einstein model of solids, paramagnetism, Helmholtz and Gibbs free energies, chemical potential, thermodynamic identities, Boltzmann statistics, the partition function, and quantum statistics.
PR: Mathematics 2000, PHYS 2053 and PHYS 2750 or (2056)
3500 Electromagnetic Fields I examines the laws of electrostatic and magnetostatic fields based on vector calculus and a local formulation. Topics covered include Gauss's law, potentials, energy and work, the multipole expansion, Laplace's equation and boundary conditions, linear dielectrics, electric polarization, electric displacement, capacitance, magnetic fields B and H , vector potentials, Lorentz force, magnetization and Maxwell's equations.
CR: Engineering 5812
PR: PHYS 2055 and Mathematics 3202
3550 Electric Circuits covers circuit elements. Simple resistive circuits. Techniques of circuit analysis. Topology in circuit analysis. Operational amplifiers. Reactive circuit elements. Natural response and step response of RL, RC and RLC circuits. Circuits driven by sinusoidal sources. Mutual inductance. Series and parallel resonance. Laplace transforms in the analysis of frequency response.
CO: Mathematics 2260
CR: Engineering 3821
LC: 6
PR: Mathematics 2050, Mathematics 2260 or (the former Mathematics 3260), PHYS 2055

3551 Analogue Electronics - inactive course.
3600 Optics and Photonics 1 covers topics in geometrical and physical optics and applications of associated phenomena, principles, and concepts to photonics. Topics include geometrical optics (thin lenses, mirrors, and optical instruments), physical optics (two-beam and multiple-beam interference, Fraunhofer diffraction, reflection, transmission, and polarization), and applications (fibre-optic light guides, modulation of light waves, and optical communication systems).
PR: Mathematics 2000 and PHYS 2055
3750 Quantum Physics 1 introduces the foundational techniques that are required to understand the physics of atoms and molecules. Beginning with the wave-particle duality of nature, the wave function and the timeindependent Schrodinger equation, techniques to calculate wave functions and macroscopic observables in simple one-dimensional models are covered. The three-dimensional hydrogen atom, the simplest real-life system that allows for a quantitative quantum description, is then examined in detail. CO: Mathematics 2000. PHYS 3220 is recommended
PR: PHYS 2750 (or 2056 or CHEM 2302). PHYS 3220 is recommended.
3751 Quantum Physics II is an introduction to the physics of elementary particles. After a brief overview of special relativity and non-relativistic quantum mechanics, this course covers relativistic quantum mechanics (Klein-Gordon and Dirac equations, antiparticles, spin, transition probability,
and Feynman diagrams) and particle physics (leptons and quarks, strong and weak interaction, conservation laws, and the standard model of elementary particles).
PR: PHYS 3750
3800 Computational Physics is a project-based course that trains students to become functional in computational methods by writing and compiling computer code (C/Fortran) in a Unix environment to solve problems from different areas of physics. Students complete one or more projects that introduce students to a particular class of numerical methods. Lectures and tutorials cover the theory that underlies the computational methods and background for code development and the application of the required numerical methods.
LH: 2
PR: Computer Science 1510, or 1001, or Engineering 1020 (or other computer programming course as approved by the instructor). PHYS 2820, Mathematics 2260 (or the former Mathematics 3260), and Mathematics 3202

## 3810 Mathematical Analysis - inactive course.

3820 Mathematical Physics I focuses on applications of mathematical techniques to solve problems in physics. Vectors, vector calculus, matrices and tensors, coordinate systems and transformations, and summation notation are reviewed. Topics in complex numbers, functions and calculus are introduced, including branch cuts, differentiation, integration, Cauchy formula, series, residue theorem, and the gamma function. Other topics include differential equations using series solutions and separation of variables, and Fourier series of real and complex functions.
PR: Mathematics 2260 (or the former Mathematics 3260), an

## Mathematics 3202

3900 Experimental Physics develops experimental, analytical, and communications skills through extended experiments in fields of physics including optics, magnetism, fluids, spectroscopy, materials characterization, and modern physics. Students select from a range of experiments that illustrate concepts encountered in previous courses to apply existing knowledge and problem solving skills, while other experiments introduce more advanced techniques and phenomena.

## CR: PHYS 4880

LC: 0
PR: at least two of PHYS 2053, 2820, 2055, PHYS 2750 (or 2056); Science 1807 and Science 1808
4000 Solid State Physics focuses on the relation between structure and physical properties in crystalline materials. An introduction to crystal structure addresses symmetry and reciprocal space. Phonons and lattice vibrations are linked with thermal properties of solids. Electrons in solids, including energy bands and semiconductors, lead to discussions of transport in solids.
PR: PHYS 3400 and 3750

## 4200 Classical Mechanics III - inactive course.

4205 Introduction to Fluid Dynamics (same as Mathematics 4180) covers basic observations, mass conservation, vorticity, stress, hydrostatics, rate of strain, momentum conservation (Navier-Stokes equation), simple viscous and inviscid flows, Reynolds number, boundary layers, Bernoulli's and Kelvin's theorems, potential flows, water waves, thermodynamics.
CR: Mathematics 4180
PR: PHYS 3220 and either Mathematics 4160 or the former PHYS 3821 or waiver approved by the instructor

4210 Continuum Mechanics - inactive course.
4220 Introduction to general Relativity (same as Mathematics 4130) studies both the mathematical structure and physical content of Einstein's theory of gravity. Topics include the geometric formulation of special relativity, curved spacetimes, metrics, geodesics, causal structure, gravity as spacetime curvature, the weak-field limit, geometry outside a spherical star, Schwarzschild and Kerr black holes, Robertson-Walker cosmologies, gravitational waves, an introduction to tensor calculus, Einstein's equations, and the stress-energy tensor.
CO: Mathematics 4230
CR: Mathematics 4130
PR: Mathematics 3202 and one of PHYS 3220, Mathematics 4230 or waiver approved by the instructor

4300 Advanced Physical Oceanography covers dynamical physical oceanography. The equations of motion in oceanography are derived and analysed. Topics include geostrophy, conservation equations, linear and non-linear wave theory, and open ocean and shelf circulation dynamics.
PR: PHYS 3300 and 3820

## 4330 Topics in Physical Oceanography - inactive course.

4340 Modelling in Environmental Physics covers the basic principles underlying environmental modelling. Techniques for numerical modelling are introduced with applications to simulation of terrestrial, atmospheric and
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=\mathrm{Co}$-requisite(s); $\mathrm{CR}=\mathrm{Credit}$ can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).
oceanic environments. Concepts and principles of free and forced dynamical systems are introduced and applied to the analysis and interpretation of simplified climate and environment model simulations. Includes some discussion of dynamics and transition to chaos in environmental systems, uncertainty in their simulations and predictability of future environmental and climate changes.
PR: PHYS 3340 and PHYS 3820 or waiver approved by the instructor
4400 Statistical Mechanics covers ensembles. Classical and quantum statistical mechanics. Statistical mechanics of phase transitions. Advanced topics in statistical mechanics.
CO: PHYS 3750
PR: PHYS 3400 and 3750
4500 Electromagnetic Fields II covers electrodynamics and the applications of Maxwell's equations. Topics covered include electrodynamics (Maxwell's equations and boundary conditions), conservation laws (continuity equation, Poynting's theorem, and momentum conservation), electromagnetic waves (wave properties, reflection and transmission, absorption and dispersion, guided waves), radiation (potential and fields, dipole radiation, and radiation from point charges), and relativistic electrodynamics. Selected topics in electrodynamics and applied electromagnetism may be introduced.
CR: Engineering 6813
PR: PHYS 3500 and 3820
4600 Optics and Photonics II covers principles of lasers, interactions of laser light and matter, and new developments in the fields of optics and photonics. Topics include wave optics, optical resonators, interaction of radiation and atomic systems, principles and techniques of lasers, nonlinear optics and devices, guided-wave optics, and fibre-optic communication. Recent development in the fields, such as photonic crystal optics, ultrafast optics, and nano-optics will be introduced.
PR: PHYS 3500 and 3600
4700 Atomic and Molecular Physics - inactive course.
4710 Nuclear Physics - inactive course.
4820 Mathematical Physics II covers topics on the common partial differential equations of Mathematical Physics and boundary value problems; Sturm-Liouville theory, introduction to the theory of distributions, Dirac delta function, Laplace and Fourier transforms, Green's functions, Bessel functions, Legendre functions, spherical harmonics, and other topics such as group theory.
PR: PHYS 3820 or all of Mathematics 2051, 2260, 3202, 3210
4850 Quantum Mechanics is a mathematically-based course that covers. the postulates of quantum mechanics; Hermitian operators; $x, p$ and matrix representations of quantum mechanics; the harmonic oscillator; spin and orbital angular momentum and addition of angular momentum; stationary perturbation theory; time dependent perturbation theory.
PR: PHYS 3750 and 3820
4851 Advanced Quantum Mechanics is a continuation of PHYS 4850 that covers: density operators; unitary operators, including symmetry operations and the time-evolution operator; gauge transformations and Berry's phase; quantum mechanical entanglement; systems of identical particles.
PR: PHYS 4820 and 4850
4852 Quantum Information and Computing (same as Mathematics 4252) covers postulates of quantum mechanics, matrix theory, density matrices, qubits, qubit registers, entanglement, quantum gates, superdense coding, quantum teleportation, quantum algorithms, open systems, decoherence, physical realization of quantum computers.
CR: Mathematics 4252
PR: Mathematics 2051 or PHYS 3820
4900 Experimental Physics II builds on the skills developed in Experimental Physics I through advanced and open-ended experiments in fields of physics including optics, magnetism, fluids, spectroscopy, materials characterization, and modern physics.
LC: 0
LH: 6
PR: PHYS 3900, Science 1807 and Science 1808
490A/B Honours Physics Thesis is required of the Honours program.
6317 Underwater Acoustics covers basic theory of sound, sound in the ocean environment, wave equation, ray tracing, sonar system operation, transducers, applications.
PR: PHYS 3810 (or the former Mathematics 3220) and 3220, or waiver approved by the instructor
6318 Ocean Climate Modelling covers numerical techniques, finite difference, finite element and spectral methods. Introduction to the climate system. Ocean climate models. Box models. Variability on interdecadal, centennial and geological scales. Zonally averaged models. 3-D ocean modelling. Thermohaline circulation. General circulation models. Climate modelling and global warming.

PR: PHYS 3810 (or Mathematics 3202), PHYS 3300 and the completion of any 15 credit hours in core courses at the 3000 or 4000 level in the Faculty of Science or waiver approved by the instructor

### 12.11 Psychology

Psychology courses are designated by PSYC.

### 12.11.1 Non-Restricted Courses

These courses are open to all students who have the appropriate prerequisites. Students who intend to major in Psychology should note the credit restrictions for PSYC 2010, 2100, 2440, 2610, 2810, 2920, and 3640 as taking any of these courses will reduce options in the Majors program
1000 Introduction to Psychology is the first half of a two-semester introduction to Psychology as a biological and social science. Topics may include history, research methodology, behavioural neuroscience, sensation and perception, consciousness, learning, and memory.

1001 Introduction to Psychology is the second half of a two-semester introduction to Psychology as a biological and social science. Topics may include emotion, motivation, stress and health, personality and individuality, psychological disorders and treatment, and social psychology.
PR: PSYC 1000
2010 Biological and Cognitive Development is a survey of principles underlying human development from the prenatal stage to adolescence. Topics covered will include biological, physical, linguistic, sensory, cognitive and intellectual changes.
CR: PSYC 2025, PSYC 3050
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2020 Social and Personality Development (same as the former PSYC 2011 ) is an examination of relevant research on human socialization and personality development with special emphasis on parenting influences, attachment, imitation, sex role and moral development in childhood and adolescence
CR: PSYC 2025, the former PSYC 2011
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2030 Adult Development (same as the former PSYC 2012) examines physical and psychological changes from early adulthood until the end of the lifespan. Topics include career choices, love partnerships, parenting and grandparenting, cognitive changes, interpersonal changes, and healthy aging.
CR: the former PSYC 2012
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2100 Attitudes and Social Cognition is an examination of the concepts and principles involved in the interaction between the individual and others. Emphasis will be on the theoretical and empirical concerns of attitude formation and change, social perception, and social cognition.
CR: the former PSYC 2125, PSYC 3100
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2120 Interpersonal and Group Processes - inactive course.
2150 Introduction to Forensic Psychology will provide an in-depth overview of the relationship between psychology and the law. A variety of topics will be discussed and critically evaluated, including the use and misuse of psychology-based investigative methods such as offender and geographic profiling, detection of deception, investigative interviewing, eyewitness testimony, jury decision-making, corrections and treatment, risk assessment, and criminal responsibility.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2151 Health Psychology will explore the history, aims and future of health psychology. Topics covered will consider the contributions of a wide range of psychological theory within the context of psychosocial risk factors for illness, illness prevention, health promotion, and the health care system itself. These theories extend from rather individualistic notions of health and wellness (e.g., personality, attitudes, and behaviour) to concepts associated with characteristics of the broader social environment (e.g., social support, economic challenges, and organizational factors). An overall bio-psychosocial approach to health and wellness is explored.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2240 Survey of Learning - inactive course.
2440 Human Memory and Cognition - inactive course.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

2540 Psychology of Gender is an examination of the influence of gender on development and socialization, attitude formation, cognition, personality and mental health.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2560 Intelligence - inactive course
2610 Personality - inactive course.
2800 Drugs and Behaviour is an examination of the neurophysiology of drug action, the measurable effect of drugs on experimentally controlled behaviour, and a survey of information available on common selfadministered drugs and their immediate and long-term effects.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2810 Brain and Behaviour is a broad survey of physiological psychology at an elementary level. Topics will include the following: structure of the nervous system, nerve conduction, sensory and motor systems, behavioural biology of reproduction, aggression, feeding and drinking, sleep and arousal, pleasure and pain, learning and memory.
CR: PSYC 2520, 2825, the former PSYC 3801
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
2920 Research Methods in Psychology for Non-Majors provides an introduction to the design, understanding, and application of psychological research. Topics covered include understanding and applying scientific method, creating and testing hypotheses, constructing reliable and valid experiments, and the proper use of controls. An emphasis will be placed on thinking critically about psychology and common errors of judgment.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major or any Psychology honours or joint honours programs

3430 The Psychology of Thinking - inactive course.
3501 Industrial Psychology - inactive course.
3533 Sexual Behaviour covers the most important aspects of human sexuality with a psychology theory and research framework. The course will examine the biological, behavioural and socio-cultural bases of the human sexual response. Topics include sexual interaction and communication, contraception, sexually transmitted infections, reproduction, sexual orientation, transgender and intersex, variations in sexual behaviour, sex and gender, sexual dysfunction and therapy, and sexual coercion.
PR: PSYC 1000 and 1001
UL: cannot be used towards the Psychology major
3577 Program Evaluation - inactive course.
3640 The Psychology of Abnormal Behaviour covers problems of definition, the history of beliefs about abnormal behaviour and the implication of a behavioural model for the understanding and control of behaviour problems.
CR: PSYC 3650, PSYC 3626
PR: any 2000 level course in Psychology
UL: cannot be used towards the Psychology major

## 4810 Human Neuropsychology - inactive course.

### 12.11.2 Majors Courses

These courses are restricted to Majors in Psychology and Behavioural Neuroscience.
2520 Introduction to Behavioural Neuroscience is based on the idea that psychological and neuroscience research efforts are synergistic. Neuroscience research can reveal mechanisms that help explain the mind and behavior, while concepts developed by psychological research often define the topics that neuroscience investigates. The course will survey a broad range of topics that include the fundamentals of neuroanatomy, neurophysiology, and neurodevelopment, as well as higher level functions such as motivation, emotion, sleep, memory, language, and mental illness.
CR: PSYC 2521, 2810, 2825, the former PSYC 3801
PR: PSYC 1000 and 1001 and admission to a Major in Psychology or Behavioural Neuroscience; minors may be permitted to take this course if space permits
UL: not applicable for credit towards the Major in Behavioural Neuroscience
2521 Introduction to Neuroscience for Behavioural Neuroscience
Majors is a comprehensive survey of the different domains of behavioural neuroscience, with an emphasis on systems level. It will cover a broad range of topics including the fundamentals of neuroanatomy, neurophysiology, and neurodevelopment, as well as higher level functions such as sleep, emotion, language, consciousness and mental illness. Students will be able to describe the basic mechanisms involved in neural system function and how these affect behaviour and several forms of neuroplasticity.

CR: PSYC 2520, 2810, 2825, the former 3801
LH: one 3-hour laboratory period weekly
PR: PSYC 1000 and 1001 and admission to a Major in Behavioural Neuroscience; Science 1807 and 1808
UL: not applicable for credit towards the Major in Psychology
2910 Research Methods in Psychology I is an introduction to the design and application of psychological research with particular concentration on understanding and applying scientific method, creating and testing hypotheses, constructing reliable and valid experiments, managing and analysing data sets, using statistical software, and scientific writing. Specific topics include descriptive statistics including measures of central tendency, variability and relative standing, inferential statistics such as $t$ tests for one and two sample designs, correlation and regression, and non-parametric statistics.
CR: Statistics 2500, 2550, the former 2510, PSYC 2925
LH: one laboratory period weekly
PR: PSYC 1000 and 1001; Mathematics 1000 or two of 1090, 109B, 1050 and 1051 (or equivalent) and admission to a Major in Psychology or Behavioural Neuroscience
2911 Research Methods in Psychology II covers research methods in psychology with a focus on more complex research designs and statistical approaches, within the realm of experimentation and beyond the laboratory. Specific topics include controlling participant variables, using between and repeated measures designs within the context of Analysis of Variance (ANOVA). Particular ANOVA approaches include one-way and factorial designs, within subject design, and two-way mixed designs.
CR: Statistics 2501, 2560, PSYC 2950
LH: one laboratory period weekly
PR: PSYC 2910 and admission to a Major in Psychology or Behavioural Neuroscience
2930 Research and Writing in Psychology is an introduction to the fundamentals of preparing psychology reports, emphasizing organization, correct use of terminology, adherence to appropriate discipline style, concise and accurate description, preparation of abstracts, and integration of numerical data. Topics for reports will be selected each semester by the instructor.
PR: PSYC 1000 and 1001 and admission to a Major in Psychology or Behavioural Neuroscience
UL: may not be used towards the Faculty of Humanities and Social Sciences CRW requirement of the former R/W requirement
3050 Developmental Psychology is an examination of the methods of study and an evaluation of current findings and theoretical issues of importance to an understanding of development. Topics will be drawn from perception, learning, cognition, social learning, memory and language development.
CR: PSYC 2010, PSYC 2025
PR: PSYC 2520, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3100 Social Psychology is an examination of the concepts and principles involved in social behaviour. Topics covered will include attitudes, social cognition, interpersonal relations, and group processes.
CR: PSYC 2100, the former PSYC 2125
PR: PSYC 2520, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3251 Learning introduces students to topics of learning phenomena and learning theories. Topics to be studied include the evolutionary context of learning, habituation and sensitization, Pavlovian conditioning, operant conditioning, and generalization and discrimination in learning. Applications of learning principles to topics such as child rearing, education, drug use and rehabilitation, as well as to other topics of contemporary interest, will also be discussed.
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, Science 1807 and 1808, and admission to a Major in Psychology or Behavioural Neuroscience

3350 Perception is a broad survey of theory and research in sensation and perception.
PR: PSYC 2520, the former 2570, and 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

3450 Human Cognition is an introduction to the experimental study of the mental representations and processes involved in human cognition. Topics such as attention, perception and pattern recognition, concepts and the organization of knowledge, language processes, mental imagery, reasoning, problem solving, decision making and skilled performance will be covered with an emphasis on experimental analysis and techniques.
CR: PSYC 2440, PSYC 2425
PR: PSYC 2520, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

3510 Directed Study provides an opportunity to work with an individual faculty member on a research project. The student will submit a formal written report of the research conducted. Permission of the instructor is required
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: PSYC 2911 and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

3511 Directed Study provides an opportunity to work with an individual faculty member on a research project. The student will submit a formal written report of the research conducted. Permission of the instructor is required.
PR: PSYC 2911 and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

3620 Personality Theory and Research - inactive course.
3650 Abnormal Psychology is an examination of the nature, explanation and treatment of psychological disorders with an emphasis on research methods and current findings.
CR: PSYC 3640, PSYC 3626
PR: PSYC 2520, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3750 Animal Behaviour I (same as Biology 3750) is an introduction to the mechanisms, development, function and evolution of behaviour in animals. Topics include the history of ethology and comparative psychology, and behavioural ecology; methods of animal behaviour study, behaviour of animals in relation to physiology, learning, communication, mating systems, and other areas in Biology and Psychology.
CR: Biology 3750
PR: Biology 1001, 1002 and PSYC 2520, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

3800 Cellular and Molecular Neuroscience addresses the structure and function of neurons and neural circuits and examines principles of electrochemical neural communication at the macroscopic, microscopic and molecular level. The relevance of this knowledge to understanding brain mechanisms of normal and diseased brain functions will be touched upon. The molecular basis of the formation of some types of memories will be explored.
LH: one laboratory period weekly
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, Biology 1001 and 1002, and admission to a Major in Psychology or Behavioural Neuroscience; and Science 1807 and 1808

3810 Neurobiology of Learning and Memory (same as the former PSYC 3250) examines how organisms adjust their behaviour to regularities in the environment as a result of experience. Experience changes behavior by modifying the nervous system. We will take a multidisciplinary approach, combining information from psychology and neuroscience to study learning, and memory. Students will gain an understanding of sensitization, habituation, and classical and operant conditioning using animal models, with a particular emphasis on the synaptic and molecular changes that occur with learning and memory.
CR: the former PSYC 3250
PR: PSYC 2520 or 2521,2911 , and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3820 Research Techniques in Behavioural Neuroscience allows students to increase their understanding of how knowledge is generated in the study of neuroscience and behavior. Students will visit various oncampus laboratories that are engaged in research relevant to these fields. In addition to observations and hands-on tutorials, readings, discussions, and writing assignments will strengthen students' understanding of the techniques used to answer specific research questions in neuroscience and behaviour.
PR: Science 1807; PSYC 2520, 2911, and 2930, or the former 2570, Biology 1001 and 1002, and admission to a Major in Psychology or Behavioural Neuroscience
3830 Behavioural Endocrinology explores the behavioural effects of hormones and the question of how hormones act on the brain to influence behaviour. Topics include: basic concepts in neuroendocrinology, reproductive behaviour (sexual and parental), sexual differentiation of the brain and behaviour, aggressive behaviour, and the neuroendocrinology of stress, including the effects of stress on the brain and behaviour.
PR: PSYC 2520, 2911, and 2930 or the former 2570, Biology 1001 and 1002, and admission to a Major in Psychology or Behavioural Neuroscience
3840 Neurobiology of Stress will cover topics including the effects of stress on the immune system, hypothalamicpituitary-adrenal axis, neurogenesis and neuroplasticity, neurotransmitter and neuropeptide release, cognition and emotional processing, and in utero and early postnatal development. The relationship between stress and mental disorders such as depression, posttraumatic stress disorder, anxiety disorders, schizophrenia, bipolar disorder, substance abuse and addiction, dementia and age-related cognitive decline as well as resilience to stress will be discussed.
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3860 Neuropsychopharmacology introduces students to the
neurochemical and molecular underpinnings of behavior, with special emphasis on the biological principles underlying the etiology, pathophysiology and treatment of mental disorders. As a broad subdiscipline of neuroscience, it is ideal for those seeking to integrate neuroanatomy, neurophysiology, pharmacology and the behavioural sciences. It will provide a thorough understanding and appreciation about how basic and clinical research can be synthesized and used for the development of various forms of therapies.
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience
3900 Design and Analysis III is a course on complex and specialized research design in Psychology. Multifactor research designs that employ both between- and within-subjects independent variables. Advantages and disadvantages of using multifactor research designs to test psychological hypotheses. Hierarchical designs and incomplete factorials. The use of covariates and blocking to increase experimental precision. Problems created by missing data. Single subject designs. How to answer specific psychological questions in the context of complex designs. The design and analysis of non-experimental psychological research. Applications of such techniques as the analysis of variance and multiple linear regression to the data obtained with these research designs, with special attention to problems inherent in psychological research.
CR: PSYC 3950, Statistics 3520
LH: one laboratory period weekly
PR: PSYC 2911 and admission to a Major in Psychology or Behavioural Neuroscience
4050 Selected Topics in Developmental Psychology $I$ is an intensive examination of a specific topic in developmental psychology.
PR: PSYC 3050 and admission to a Major in Psychology or Behavioural Neuroscience
4051 Selected Topics in Developmental Psychology II is an intensive examination of a specific topic in developmental psychology.
PR: PSYC 3050 and admission to a Major in Psychology or Behavioura Neuroscience

4070 Research Experience in Development Psychology allows students to gain research experience in selected areas of developmental psychology.
PR: PSYC 3050 and admission to a Major in Psychology or Behavioural Neuroscience

4150 Selected Topics in Social Psychology I is an intensive examination of a specific topic in social psychology.
PR: PSYC 3100 and admission to a Major in Psychology or Behavioural Neuroscience

4151 Selected Topics in Social Psychology II is an intensive examination of a specific topic in social psychology.
PR: PSYC 3100 and admission to a Major in Psychology or Behavioura Neuroscience
4152 Selected Topics in Applied Social Psychology - inactive course.

## 4160 Psychology and the Law - inactive course.

4170 Research Experience in Social Psychology will provide research experience in a selection of areas typically studied by social psychologists such as attitudes, prejudice, groups and social cognition. Students will acquire experience with research methods that are used to advance the body of knowledge in social psychology.
PR: PSYC 3100 and admission to a Major in Psychology or Behavioural Neuroscience

4250 Selected Topics in Learning and Motivation I an intensive examination of a specific topic in learning and motivation.
PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience
4251 Selected Topics in Learning and Motivation II is an intensive examination of a specific topic in learning and motivation.
PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience

4260 Learning Processes and Drug Effects - inactive course.
4270 Research Experience in Learning allows students to gain research experience in selected areas of learning.
PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience; Science 1807
4350 Selected Topics in Perception I - inactive course.
4351 Selected Topics in Perception II is an intensive examination of a specific topic in perception.
PR: PSYC 3350 and admission to a Major in Psychology or Behavioural Neuroscience

4370 Research Experience in Perception allows students to gain research experience in selected areas of perception.
$\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

PR: PSYC 3350 and admission to a Major in Psychology or Behavioural Neuroscience

4450 Selected Topics in Cognition I (same as the former PSYC 4400) is an intensive examination of a specific topic in cognition.
CR: the former PSYC 4400
PR: PSYC 3450 and admission to a Major in Psychology or Behavioural Neuroscience

4451 Selected Topics in Cognition II (same as the former PSYC 4401) is an intensive examination of a specific topic in cognition.
CR: the former PSYC 4401
PR: PSYC 3450 and admission to a Major in Psychology or Behavioural Neuroscience

4452 Selected Topics in Cognition: Reading - inactive course.
4453 Selected Topics in Cognitive Science (same as the former PSYC 4402 ) is an intensive examination of a specific topic in cognitive science from a psychological perspective.
CR: the former PSYC 4402
PR: two courses chosen from PSYC 3050, the former PSYC 3250, 3350, 3450, the former 3801 and admission to a Major in Psychology or Behavioural Neuroscience

4461 Psycholinguistics - inactive course.
4462 Human Memory - inactive course.
4470 Research Experience in Cognition allows students to gain research experience in selected areas of cognition.
PR: PSYC 3450 and admission to a Major in Psychology or Behavioural Neuroscience

4500 Selected Topics in Psychology I is an intensive examination of a specific topic in psychology that crosses traditional subdisciplines.
PR: two 3000-level majors courses (other than 3900) and admission to a Major in Psychology or Behavioural Neuroscience

4501 Selected Topics in Psychology II is an intensive examination of a specific topic in psychology that crosses traditional subdisciplines.
PR: two 3000-level majors courses (other than 3900) and admission to a Major in Psychology or Behavioural Neuroscience

4610 Selected Topics in Personality I - inactive course.
4620 Selected Topics in Personality II is an intensive examination of a specific topic in personality.
PR: PSYC 3620 and admission to a Major in Psychology or Behavioural Neuroscience

4650 Selected Topics in Abnormal Behaviour I is an intensive examination of a specific topic in abnormal behaviour.
PR: PSYC 3650 and admission to a Major in Psychology or Behavioural Neuroscience

4651 Selected Topics in Abnormal Behaviour II - inactive course.
4660 Developmental Psychopathology - inactive course.
4661 Family Psychology is a study of the reciprocal relationship between family processes and abnormal behaviour. The course will focus on the role of family dynamics in the etiology of abnormal behaviour, the impact of psychological disorders on family functioning and the application of family therapy to create therapeutic change.
PR: PSYC 3650, or all of 2520, 2930 or the former 2570, 2911, and 3640, and admission to a Major in Psychology or Behavioural Neuroscience
4662 Clinical Psychology and Theories of Psychotherapy - inactive course.

4670 Research Experience in Abnormal Psychology allows students to gain research experience in selected areas of clinical psychology.
PR: PSYC 3650 and admission to a Major in Psychology or Behavioural Neuroscience

4671 Research Experience in Personality - inactive course.
4701 Animal Behaviour II-inactive course.
4750 Selected Topics in Animal Behaviour I is an intensive examination
of a specific topic in animal behaviour.
PR: PSYC 3750 or Biology 3750 and admission to a Major in Psychology or Behavioural Neuroscience
4751 Selected Topics in Animal Behaviour II is an intensive examination
of a specific topic in animal behaviour.
PR: PSYC 3750 or Biology 3750 and admission to a Major in Psychology or Behavioural Neuroscience

4770 Research Experience in Animal Behaviour (same as Biology 4770) allows students to gain research experience in selected areas of animal
behaviour. This course may be offered in a usual 12-week semester or as a two-week field course.
CR: Biology 4770
LC: either three hours of lecture per week or a two-week field course that embodies equivalent instructional time
PR: Science 1807 and Science 1808; PSYC 2520, 2930 or the former 2570, 2911 and PSYC 3750 or BIOL 3750 and admission to a major in Psychology or Behavioural Neuroscience

4850 Selected Topics in Behavioural Neuroscience I is an intensive examination of a specific topic in behavioural neuroscience.
PR: one of PSYC 3800, the former 3801, 3820, or the former PSYC 3250 and admission to a Major in Psychology or Behavioural Neuroscience

4851 Selected Topics in Behavioural Neuroscience II - inactive course.
4852 Selected Topics in Behavioural Neuroscience (Neurobiology of Time and Space) will examine selected topics in timing, circadian rhythms, spatial learning and navigation.
PR: one of the former PSYC 3250, 3800, the former 3801, 3810, 3820, 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience

4853 Selected Topics in Behavioural Neuroscience (Neurobiology of Sex) will examine the development of sex differences in the brain and behaviour by considering both animal models and human studies.
PR: one of the former PSYC 3250, 3800, the former 3801, 3810, 3820 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience

4854 Selected Topics in Behavioural Neuroscience (Neurobiological Diseases and Disorders) will examine the neurobiology of neurodegenerative diseases/psychological disorders, and the potential of therapeutic interventions.
PR: one of the former PSYC 3250, 3800, the former 3801, 3810, 3820, 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience
4870 Research Experience in Behavioural Neuroscience allows students to gain research experience in selected areas of neuroscience.
PR: Science 1807 and Science 1808; PSYC 3820 or the former 3801, and admission to a Major in Psychology or Behavioural Neuroscience
4910 Systems in Contemporary Psychology is a study of paradigms and explanations in contemporary psychology in the context of their historical antecedents.
PR: at the St. John's campus, 30 credit hours in Psychology courses required in the majors program and admission to a Major in Psychology or Behavioural Neuroscience or, at the Grenfell campus, 30 credit hours in Psychology courses including Psychology 3950

4980 The Psychology of Money and Financial Behavior is designed to help students understand the multitude of factors that influence decisions individuals make about money and other related objects of value. These factors include the perceptions, motivations, attitudes, emotions, personality characteristics, and cognitive process that underlie human interactions with money. The course will also explore the developmental and neurological bases of human monetary behavior as well as clinical aspects such as money related addictions, criminality, and psychopathology.
PR: PSYC 2520, the former 2570 and 2911, admission to a Major in Psychology or Behavioural Neuroscience, and any two 3000 level majors courses in Psychology
499A and 499B Honours Dissertation is a linked course, based on independent study of an approved problem in Psychology. The topic will be chosen in consultation with the Faculty Advisor. The first semester will normally involve directed reading in this area, and preparation of a dissertation proposal. The second semester will be devoted to conducting the study, gathering data, data analysis and preparation of a formal written report. The dissertation must be submitted for grading before the end of the tenth week of the semester in which the student is registered for 499B.
CH: 6
PR: admission to the Honours Program

### 12.11.3 Psychology Work Term Descriptions

The Following Work Terms are a requirement of the Psychology Co-op Program only.
199W Work Term I follows the successful completion of Semester 4. Students are expected to learn, develop and practice the high standards of behaviour and performance normally expected in the work environment. (A detailed description of each job is normally posted during the job competition.) As one component of the Work Term, the student is required to complete a work report. The work report, as a minimum requirement should:

1. analyse an issue/problem related to the student's work environment.
2. demonstrate an understanding of the structure of a professional report, and show reasonable competence in written communication and presentation skills. (Students should consult the evaluation form

[^29]provided in the placement package.)
Late reports will be graded as FAL unless prior permission for a late report has been given by Co-operative Education.
Seminars on professional development, conducted by Co-operative Education, are presented during Semester 4 to introduce and prepare the student for participation in the subsequent work terms. Topics may include among others, work term evaluation, work report writing, career planning, employment seeking skills, resume preparation, self employment, ethics and professional concepts, behavioural requirements in the work place, assertiveness in the work place and industrial safety.

299W Work Term II follows the successful completion of Semester 6. Students are expected to further develop and expand their knowledge and work-related skills and should be able to accept increased responsibility and challenge. In addition, students are expected to demonstrate an ability to deal with increasingly complex work-related concepts and problems. The work report, as a minimum requirement, should:

1. analyse an issue/problem related to the student's work environment and
demonstrate an understanding of practical application of concepts
relative to the student's academic background
2. demonstrate competence in creating a professional report, and
3. show competence in written communication and presentation skills

Late reports will be graded as FAL unless prior permission for a late report has been given by Co-operative Education.
399W Work Term III follows the successful completion of Semester 7. Students should have sufficient academic grounding and work experience to contribute in a positive manner to the problem-solving and management processes needed and practiced in the work environment. Students should become better acquainted with their discipline of study, should observe and appreciate the attitudes, responsibilities, and ethics normally expected of professionals and should exercise greater independence and responsibility in their assigned work functions. The work report should reflect the growing professional development of the student and, as a minimum requirement,
will:

1. demonstrate an increased ability to analyse a significant issue/problem related to the student's experience in the work environment
2. demonstrate a high level of competence in producing a professional report, and
3. show a high level of competence in written communication and presentation skills
Late reports will be graded as FAL unless prior permission for a late report has been given by Co-operative Education.

### 12.12 Science

1807 Safety in the Scientific Laboratory introduces students to safety practices required for working in science laboratories where hazards are present. Students complete an online module in Laboratory Safety. Normally, it will be taken before the start of the semester in which students take their first science laboratory course with this prerequisite, and it must be completed no later than the first Friday of the semester. Check department lists of courses to see where this is a prerequisite.
CH: 0
OR: only offered online; completion time estimated to be one hour
1808 WHMIS introduces students to Newfoundland and Labrador's Workplace Hazardous Materials Information System (WHMIS). Students will complete an online module in WHMIS. Normally, it will be taken before the start of the semester in which students take their first science laboratory course with this prerequisite, and it must be completed no later than the first Friday of the semester. Check department lists of courses to see where this is a prerequisite.




SCHOOL OF SOCIAL WORK

## SCHOOL OF SOCIAL WORK

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www.mun.ca/socwrk
Interim Dean
Klein, R., B.S. Arizona, M.S.W. Maryland, M.A., Ph.D. Syracuse; Professor
Up-to-date personnel listings are available at www.mun.ca/socwrk/about/people.

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in UNIVERSITY REGULATIONS - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 School Description

A social work program at Memorial University of Newfoundland commenced in 1963 with the offering of a two-year diploma in public welfare. In 1965, the Bachelor of Arts (Social Welfare) degree was initiated, continuing until 1970 when the Bachelor of Social Work was established. The School also offers graduate degrees at the master and doctoral level
Social work courses are designed for delivery on a philosophical base of humanism and social justice. This is accomplished in an empowering teaching and learning environment, through the practice of anti-oppression principles, within the context of critical thinking. The curriculum in social work draws upon the substance and analytical processes of the social and behavioural sciences and of the humanities. It reflects Memorial University of Newfoundland and the School of Social Work's traditional commitments to serve the people of Newfoundland and Labrador within a global context.
Additional information can be found at the School of Social Work website at www.mun.ca/socwrk
Students must meet all regulations of the School of Social Work in addition to those stated in the general regulations. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to UNIVERSITY REGULATIONS.
For information regarding fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information regarding scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.1 Vision

The School of Social Work strives to strengthen human relationships and promote social justice through academic excellence.

### 3.2 Mission

The School of Social Work promotes social justice by providing social work education, conducting scholarly inquiry, disseminating knowledge and contributing to public policy and practice thereby addressing the needs and aspirations of the local and global communities with whom we collaborate and interact.

### 3.3 Accreditation Status

Graduates of Memorial University of Newfoundland's Bachelor of Social Work programs have been enjoying the benefits of full accreditation with the Canadian Association for Social Work Education (CASWE) since 1977. The First and Second Degree undergraduate programs offered by the School of Social Work are currently accredited by the CASWE.

### 3.4 Academic and Professional Ethics

The School of Social Work espouses the highest standards of academic and professional ethics and conduct as documented in the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Practice. Ethical behaviour encompasses integrity, respect, and professionalism, and also means that students will take responsibility for their learning and pursue academic goals in an honest and engaged manner. These are principles, values, and expectations that the School of Social Work upholds as a member of the Canadian Association for Social Work Education.
When participating in coursework and field practica or representing the School at conferences and other research and academic activities, students are expected to demonstrate ethical behaviour. In decision-making, teamwork, and individual expression, students are expected to seek to understand the significance of social justice, fairness, equity and individual and collective rights.
In addition to meeting the Student Code of Conduct, students must meet the following guidelines for academic and professional ethics and conduct which are available at the School of Social Work website: The current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy \& Procedures, and the School of Social Work Social Media Policy and Guidelines for Social Work Students.

## 4 Description of Program

All courses of the School are designated by the abbreviation SCWK.

### 4.1 General Information

The Bachelor of Social Work (BSW) is a full-time program that is offered as a First or a Second Degree program and is comprised of course work and two field practica. The BSW degree qualifies graduates for beginning professional practice in social work settings.
The BSW curriculum reflects a balance of professional education and general education. The professional education courses are provided for students once they are admitted to the First Degree or Second Degree Bachelor of Social Work programs. The general
education is intended to equip students with knowledge in the humanities and relevant social sciences, including knowledge related to human development and behaviour in the social environment. The general education is addressed through complementary courses from disciplines outside the School of Social Work as outlined in Complementary Studies below.
The objectives of the undergraduate program are to prepare students to:

- promote social justice and social well-being and creatively challenge oppression;
- acquire and apply knowledge, skills, values, professional ethics and critical thinking abilities;
- recognize limitations and strengths as a beginning social work practitioner;
- integrate reflexively critical self-awareness;
- assume leadership in collaboration and interdisciplinary practice;
- utilize and participate in innovative and traditional inquiry and research models;
- creatively practice with diverse individuals and collectives;
- promote and critique the social work profession on regional, provincial, national and global levels;
- commit to the process of lifelong learning;
- participate collaboratively and respectfully in innovative teaching and learning processes; and
- address issues of transition and crisis in diverse contexts (individuals, families, groups, communities, formal organizations and society).
The aim of the BSW program is to develop social workers with generically based skills for working with individuals, families communities, and groups. Students receive an education which prepares them to work in urban centres and rural settings. A special emphasis is placed on the importance of identifying local needs and developing the means of meeting these needs in the context of available resources.
There is a Program Residency Requirement for both the First and Second Degree programs requiring students to take specific courses on the St. John's campus. Although the majority of courses are taught on-campus, selected courses are occasionally taught online.


### 4.2 Social Work Field Practica

1. In addition to their course work, students are required to complete two supervised 350 hour field practica which normally occur in Fall and Winter semesters. Students are normally expected to be available to engage in the field practicum for 28 hours each week during the semester in which the field practicum is scheduled.
2. Each field practicum is to be conducted in a setting and supervised by a qualified field instructor approved by the Field Education Coordinators, in compliance with the CASWE Standards for Accreditation and the relevant provincial legislation governing the practice of social work. Field instructors must possess, as a minimum qualification, a Bachelor of Social Work and/or a Master of Social Work from an accredited social work program plus a minimum of two years post-degree social work employment. Qualifications will be assessed in the case of international field practica.
3. Students normally are expected to be available for field practica anywhere within the Province of Newfoundland and Labrador.
4. Field practica may be offered in whole or in part outside the normal start and end dates of a semester.
5. The Field Education Coordinators are responsible for facilitating appropriate matches among students, field instructors, and field practicum settings. Although consideration will be given to all factors affecting the location and type of field practica, final approval of all field practica rests with the Field Education Coordinators. Students who refuse a field practicum deemed suitable by the Field Education Coordinators may be delayed in their program or prevented from completing their program of study.
6. Students are responsible for all costs associated with field practica including travel, immunizations, police records checks/vulnerable sector checks, child protection records checks, housing and living expenses.
7. Students shall submit an application, including a Student Brief Resume, to the Field Secretary in the preceding January for the Fall semester field practicum and the preceding September for the Winter semester field practicum.
8. Students shall complete agency specific requirements, such as criminal record checks, vulnerable sector checks, child protection records checks, or health checks, before starting the field practicum. Students unable to meet the agency's requirements may be delayed in their program or prevented from completing their program of study. Students are required to complete and update these requirements in a timely fashion and at their own expense. The requirements and procedures of any given agency may change from time to time and are beyond the control of the University.
9. Students must complete and have received final grades for all required courses before proceeding to each field practicum.

### 4.3 Field Practicum Preparation Seminars

In the semesters prior to their first field practicum, students are required to participate in six Field Practicum Preparation Seminars (Social Work $230 \mathrm{~A} / \mathrm{B}$ ). These seminars review the field practicum requirements, aid students in writing resumes and preparing for interviews, and discuss ethics, professionalism, and respectful workplaces. Students must complete all required seminars and receive a passing grade for SCWK 230A in order to proceed to SCWK 230B. Students then must complete all required seminars and receive a passing grade for SCWK 230B in order to proceed to their first field practicum.

### 4.4 Bachelor of Social Work Pledge of Professionalism Ceremony

In the Winter semester, prior to their first field practicum, students are required to participate in the Bachelor of Social Work Pledge of Professionalism Ceremony. Students who do not meet this requirement may be delayed in starting their field practicum.

### 4.5 Complementary Studies

1. Complementary Studies is a collection of non-social work courses that provides students with opportunities to gain general knowledge of people and nature, develop analytical and critical thinking and communication skills, and explore the intersections of social, political, and economic elements in society. The six learning objectives of the Complementary Studies guide the selection of the chosen disciplines and courses as outlined in Table 1 Complementary Studies.
2. Most of the selected courses do not require pre-requisites or co-requisites. Listed courses are subject to change and availability. Additional courses may be approved by the Associate Dean, Undergraduate Programs.
3. Students are required to complete Complementary Studies courses as part of the admission requirement for the First and Second Degree programs.
4. Once admitted to the First Degree program, students complete Complementary Studies courses in order to fulfill the general education course requirement.
5. Students in the First Degree program are permitted to use courses from Table 1 Complementary Studies for degree regulations subsequent to their year of entry to the Bachelor of Social Work Degree.
6. The number of courses students select for each Learning Objective in order to meet the admission requirements and the First Degree program of study requirements is outlined in Admissions Regulations for the School of Social Work and Program Regulations, respectively.

Table 1 Complementary Studies

## The Six Learning Objectives for Complementary Studies for Complementary Studies

 CoursesLearning Objective One
Students will develop university knowledge and skills in critical reading, writing, and analysis.
Learning Objective Two
Students will develop foundational knowledge and appreciation for the various expressions and experiences of human and cultural diversity.

Critical Reading and Writing Courses (CRW) chosen from the following disciplines: Archaeology, English, Folklore, Gender Studies, History, Philosophy, Political Science, Religious Studies

Anthropology 1031, 2413, 3058, 3060, 3061, 3063, 3100, 3210, 3305
English 2122, 2705, 3810
Gender Studies 1000, 2000, 2006, 2007, 2010, 3005, 3008, 3015, 3025, 3026, 3100, 3500
Humanities 2002, 3001
Linguistics 1100, 1155, 2025, 2026, 2060, 2210, 2212, 3210
Psychology 1000, 1001, 2020, 2025, 2030, 2125, 2540, 3640
Religious Studies 1000, 2610
Sociology 2100, 2200, 2220, 2230, 3311, 3314, 3731, 4071, 4072, 4092, 4201, 4213, 4230
Learning Objective Three
Students will develop
foundational knowledge and understanding of historical and contemporary experiences of Indigenous peoples of Canada.

## Anthropology 2414

Archaeology 1005 or History 1005, 2482
English 2160
Gender Studies 3015
History 2800, 3520, 3525
Humanities 3100
Linguistics 2022, 2060
Political Science 3830
Law and Society 3012, 3014
Religious Studies 3880
Sociology 4205
Learning Objective Four
Anthropology 3058, 3061, 3100, 3305
Students will develop Archaeology 1005 or History 1005
awareness of the historical and contemporary realties of social inequities, imperialism, and racism.

Learning Objective Five
Students will develop foundational knowledge in
governance and
policymaking.

Learning Objective Six
Students will develop a
critically reflective
understanding of
contemporary society
(locally, nationally, and
globally) and their place in it.
foundational knowledge and Gender Studies 1000, 2000, 2006, 2007, 2010, 3005, 3008, 3025, 3026, 3100, 3500
Geography 1050, 2001
History 2140, 2800, 3520, 3525, 3760, 3770, 3813, 3821, 4253, 4421
Sociology 2100, 3180, 3311, 3314, 3420, 4092, 4099, 4208, 4210, 4230

Gender Studies 3500
Humanities 1002, 2000, 2002
Law and Society 1000, 2000, 3012, 3014, 3015, 3016, 3300
Police Studies 1000, 2200, 2300, 3000, 3100, 3306, 3395
Political Science 1000, 1010, 1020, 2600, 2800, 3140, 3610, 3620, 3650, 3800, 3820, 3830, 3870, 3880, 3890
Sociology 3306, 3395, 4208
Anthropology 1031, 2413, 3058, the former 3318
English 3810
History 2665, 3120, 3760, 3770, 3813, 3821, 4253
Humanities 1002, 2002, 4001
Philosophy 1005 or the former 1600, 2020 or the former 2220, 2100 or the former 2551, 2110 or the former 2553, 2120 or the former 2552, 2320 or the former 2541, 2370 or the former 2400
Religious Studies 1000, 2610
Social/Cultural Studies 2000
Sociology 1000, 2100, 2110, 2120, 2200, 2210, 2220, 2230, 2240, 2250, 2270, 3130, 3140, 3210, 3290, 3307, 3311, 3318, 3400, 3420

## 5 Admission Regulations for the School of Social Work

In addition to meeting the UNIVERSITY REGULATIONS students must meet the admission regulations for the School of Social Work.

### 5.1 General Information

1. Entry to the Bachelor of Social Work is competitive. Meeting the minimum requirements for admission does not guarantee acceptance into the First Degree program or Second Degree program. The final decision on admission rests with the Bachelor of Social Work Admissions Committee. The decision of the Admissions Committee is final and there are no grounds for appeal.
2. Admission or readmission to the University does not necessarily constitute admission to the First or Second Degree programs.
3. Selection of candidates for admission to the Bachelor of Social Work is based on academic standing, relevant work experience/ volunteer experience and/or community involvement in human services related to social work, and personal suitability for a career in social work.
4. The School of Social Work depends on the cooperation of community agencies external to the University to provide field practica and instruction to its students. Many of these agencies have a range of requirements, such as a Certificate of Conduct or a Child Protection Records Check, which must be completed before starting the field practicum. Students unable to meet these agencies' requirements may be delayed in their program or prevented from completing their program of study. Students are required to complete and update these requirements in a timely fashion and at their own expense. The procedures of any given agency may change from time to time and are beyond the control of the University.
5. The School of Social Work strives to enrich its teaching, research and scholarship through the contributions of individuals from diverse backgrounds with different attributes. However, for many applicants, institutional processes and cultural and racial differences exist which have presented barriers to learning. In keeping with the Canadian Association of Social Work Education (CASWE) Standards for Accreditation, the mission of Memorial University of Newfoundland, and the mission, vision, and values of the School of Social Work, the School has developed an Educational Equity Initiative. The intent of this initiative is to encourage applicants with diverse identities, experiences, and backgrounds to apply. Further, the Educational Equity Initiative aims to correct conditions of disadvantage in professional education. Therefore, the School offers a minimum of $10 \%$ of the seats in the Bachelor of Social Work program to eligible applicants who have met the minimum requirements for admission and who identify as First Nations, Inuit, or Métis (minimum of $5 \%$ of seats) and/or as members of another equity group (minimum of $5 \%$ of seats). All applicants applying under the Educational Equity Initiative must complete the appropriate section on the School of Social Work First Degree or Second Degree Application form.

### 5.2 Application Forms and Deadlines

1. The application for admission to programs offered by the School of Social Work is submitted online; current and returning Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service. Applicants who are new to Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.
2. The Bachelor of Social Work as a First Degree and as a Second Degree program commences in the Fall semester. The deadline for application for admission to both the First and Second Degree programs is March 1. Students are encouraged to submit their applications as early as possible.
3. Applications received after the deadline and incomplete applications will not be considered.
4. A complete application package includes an application to the University (for those who have not attended Memorial University of Newfoundland in the three preceding semesters), an application to the School and any other required documentation.

### 5.3 Admission Requirements

### 5.3.1 First Degree Program



1. To be considered for admission to the First Degree Bachelor of Social Work program, applicants must have:
a. achieved an average of at least $65 \%$ in the courses comprising the last 30 credit hours of undergraduate study attempted by the end of the Winter semester for the year in which admission is being sought and for which a numeric grade has been assigned;
b. completed the 30 credit hours of required prerequisite courses outlined below by the end of the Winter semester for the year in which admission is being sought and must have achieved a minimum grade of $65 \%$ in each of these required prerequisite courses. These courses and credits must have been taken at Memorial University of Newfoundland or accepted for transfer credit from a recognized university or university college. The 30 credit hours of required prerequisite courses are:

- 3 credit hours for Social Work 1710
- 18 credit hours from the Complementary Studies courses selected for each Learning Objective listed in Table 1 Complementary Studies. Courses are counted only once even if they are listed for more than one Learning Objective or cross-listed with another department. Applicants are encouraged to select Complementary Studies courses with numbers that correspond to their current year of study. The exceptions are courses listed for Learning Objective One and Learning Objective Three. The required credit hours are as follows:
- Learning Objective One: 6 credit hours
- Learning Objective Two: 3 credit hours
- Learning Objective Four: 3 credit hours
- Learning Objective Five: 3 credit hours
- Learning Objective Six: 3 credit hours

9 additional credit hours chosen from the approved courses listed for the Complementary Studies Learning Objectives Two to Six.
c. completed a minimum of 60 hours of verified work experience/volunteer experience and/or community involvement in human services related to social work.
2. Applicants will be ranked according to their academic performance in addition to other criteria used in the selection process. For further details, please refer to the School of Social Work's website.
3. Applicants who complete any Complementary Studies courses listed for Year 2 and Year 3 of Table 2 Bachelor of Social Work (as a First Degree) prior to admission and receive a grade of less than $65 \%$ in these courses will be required, following admission, to repeat the courses or take other courses that meet the same Learning Objective(s) according to Program Regulations and achieve a minimum grade of $65 \%$ in each course.

### 5.3.2 Second Degree Program

The Bachelor of Social Work as a Second Degree is a 60 credit hour program intended for candidates who have completed a university degree, the required prerequisite courses, meet the academic performance requirements, and have verified work experience/volunteer experience and/or community involvement in human services related to social work.

1. To be considered for admission to the Bachelor of Social Work as a Second Degree, applicants must have:
a. been awarded a Bachelor's degree, or been approved (by the end of the Winter semester for the year in which admission is being sought) for the award of a Bachelor's degree from a university recognized by Memorial University of Newfoundland;
b. achieved an average of at least $70 \%$ in the courses comprising the last 60 credit hours of undergraduate study attempted by the end of the Winter semester for the year in which admission is being sought and for which a numeric grade has been assigned;
c. completed the 30 credit hours of required prerequisite courses outlined below by the end of the Winter semester preceeding the academic year in which admission is being sought and must have achieved a minimum grade of $70 \%$ in each of these required prerequisite courses. These courses and credits must have been taken at Memorial University of Newfoundland or accepted for transfer credit from a recognized university or university college. The 30 credit hours of required prerequisite courses are:

- 3 credit hours for Social Work 1710
- 21 credit hours from the Complementary Studies courses selected for each Learning Objective listed in Table 1 Complementary Studies. Courses are counted only once even if they are listed for more than one Learning Objective. The required credit hours are as follows:
- Learning Objective One: 6 credit hours or 6 credit hours in English
- Learning Objective Two: 3 credit hours
- Learning Objective Three: 3 credit hours
- Learning Objective Four: 3 credit hours
- Learning Objective Five: 3 credit hours
- Learning Objective Six: 3 credit hours
- 3 additional credit hours chosen from the approved courses listed for the Complementary Studies Learning Objectives Two to Six;
- 3 additional credit hours from Psychology courses listed in Learning Objective Two;
d. completed a minimum of 300 hours of verified work experience/volunteer experience and/or community involvement in human services related to social work.

2. Applicants will be ranked according to their academic performance in addition to other criteria used in the selection process. For further details refer to the School of Social Work website.

### 5.3.3 Acceptance Procedures for Admission

1. Applicants for the First Degree program and the Second Degree program will normally be notified of admission decisions by the end of June. Approved applicants for the Bachelor of Social Work degree will be admitted in the Fall semester only.
2. The School of Social Work will not defer any admissions to the First or Second Degree programs.

### 5.3.4 Admission Following Voluntary Withdrawal

1. A student who voluntarily withdraws from the program can apply as a new applicant to the School of Social Work in accordance with Calendar requirements for the year in which admission is being sought.
2. If the application is accepted, and the time since the last successfully completed course(s) in a BSW Program of Study is fewer than three years, then the Committee on Undergraduate Studies will review and determine what, if any, courses need to be repeated. If the time since the last successfully completed course(s) in a BSW Program of Study is three years or greater, then the student will be required to repeat previously completed Social Work courses and the Committee on Undergraduate Studies will review and determine what, if any, Complementary Studies courses will need to be completed as listed under the Program Regulations for the Social Work program.
3. The semester in which a student can register for Social Work courses depends on the availability of seats.

### 5.3.5 Admission Following Promotion Denied

1. A student who is denied promotion can apply as a new applicant to the School of Social Work in accordance with Calendar requirements for the year in which admission is being sought.
2. If the application is accepted, and the time since the last successfully completed course(s) in a BSW Program of Study is fewer than three years, then the Committee on Undergraduate Studies will review and determine what, if any, courses need to be repeated. If the time since the last successfully completed course(s) in a BSW Program of Study is three years or greater, then the student will be required to repeat previously completed Social Work courses and the Committee on Undergraduate Studies will review and determine, what, if any, Complementary Studies courses will need to be completed as listed under the Program Regulations for the Social Work program.
3. The semester in which a student can register for Social Work courses depends on the availability of seats.
4. A student who is denied promotion and required to withdraw from the program a second time will not be eligible for future admission to the program.

## 6 Program Regulations

### 6.1 Bachelor of Social Work (as a First Degree)

- The 120 credit hour Bachelor of Social Work (as a First Degree) requires 75 professional education credit hours from the School of Social Work that include two field practica plus 45 general education credit hours from Table 1 Complementary Studies as defined in Table 2 Bachelor of Social Work (as a First Degree).
- Following admission to Year 2, students must complete a total of 18 credit hours of courses selected from the following Learning Objectives listed in Table 1 Complementary Studies:
- 3 credit hours from Learning Objective Two,
- 6 credit hours from Learning Objective Three,
- 6 credit hours from Learning Objective Four, and
- 3 credit hours from Learning Objective Six.
- Courses from Complementary Studies are counted only once even if they are listed for more than one Learning Objective or crosslisted with another department.
- Following admission to Year 2, credit hours shall normally be taken in the sequence as set out in Table 2 Bachelor of Social Work (as a First Degree). Students wishing to change the sequence and/or reduce the course load specified for Years 2-4 must receive written approval from the Dean of the School. A change in course sequence may result in an extension to the length of time normally required to complete the program.
- Students must complete the application for their social work field practicum in January for the Fall semester and in April for the Winter semester.
- In order for students to proceed to each field practicum (i.e., SCWK 3300 and SCWK 4302), all professional education courses and all general education courses prior to each field practicum as listed in the Table 2 Bachelor of Social Work (as a First Degree) Program of Study must be completed with each course having a final grade of $65 \%$ or greater.

Table 2 Bachelor of Social Work (as a First Degree)

| Year / Term | Required Professional Education Courses | Required General Education Courses |
| :--- | :--- | :--- |
| Year 1 <br> Fall and Winter | SCWK 1710 | 27 credit hours from Table 1 |
| Complementary Studies as noted in the |  |  |
| Admission requirements |  |  |

By the end of Winter Year 2, all students normally have completed 6 credit hours for Learning Objective 3 and 6 credit hours for Learning Objective 4.

| Year 3 <br> Fall | SCWK 3300 <br> SCWK 3311 |  |
| :--- | :--- | :--- |
| Year 3 <br> Winter | SCWK 3221 <br> SCWK 3410 <br> SCWK 3720 | 3 credit hours from Table 1 Complementary <br> Studies Learning Objective Two <br> 3 credit hours from Table 1 Complementary <br> Studies Learning Objective Six |

By the end of Winter Year 3, all students normally have completed 3 credit hours for learning Objective 2 and 3 credit hours for Learning Objective 6.

| Year 4 | SCWK 4312 <br> Fall <br> SCWK 4314 <br> SCWK 4317 <br> SCWK 4521 <br> SCWK 4620 |  |
| :--- | :--- | :--- |
| Year 4 <br> Winter | SCWK 4302 <br> 3 credit hours from SCWK 4321, 4322, or 4323 |  |

### 6.1.1 Program Residency Requirements

Students shall be required to successfully complete all Social Work courses on the St. John's campus except for: SCWK 1710, 3300, 3311, 4302, 4321, 4322, and 4323.

### 6.2 Bachelor of Social Work (as a Second Degree)

- The 60 credit hour Bachelor of Social Work (as a Second Degree) requires 60 SCWK credit hours including two field practica as defined in Table 3 Bachelor of Social Work (as a Second Degree).
- Following admission, credit hours shall normally be taken in the sequence as set out in Table 3 Bachelor of Social Work (as a Second Degree). Students wishing to change the sequence and/or reduce the course load specified for semesters 1-4 must receive prior written approval from the Dean of the School. A change in course sequence and/or reduction of the course load may result in an extension to the length of time normally required to complete the program.
- Students must complete their application for Social Work field practicum in January for Fall semester practica and in April for Winter semester practica.
- In order for students to proceed to each field practicum (i.e., SCWK 3300 and SCWK 4302), all professional education courses as listed in the Table 3 Bachelor of Social Work (as a Second Degree) must be completed with each course having a final grade of $65 \%$ or greater.

Table 3 Bachelor of Social Work (as a Second Degree)

| Year / Term | Required Professional Education Courses |
| :--- | :--- |
| Year 1 | SCWK 2211 |
| Semester 1 | SCWK 230A |
| Fall | SCWK 2320 |
|  | SCWK 2520 |
|  | SCWK 4312 |
| SCWK 4314 |  |
| Year 1 | SCWK 230B |
| Semester 2 | SCWK 2313 |
| Winter | SCWK 2321 |
|  | SCWK 2711 |
|  | SCWK 3410 |
| SCWK 3720 |  |
| Year 1 | SCWK 3300 |
| Semester 3 |  |
| Fall | SCWK 3311 |
| Year 2 | SCWK 4302 |
| Semester 4 | SCWK 4521 |
| Winter |  |

### 6.2.1 Program Residency Requirements

Students shall be required to successfully complete all Social Work courses on the St. John's Campus except for: SCWK 1710, 3300, 3311, 4302, and 4521.

## 7 Academic Requirements and Promotion Regulations

### 7.1 General Information

1. The Committee on Undergraduate Studies will determine a student's promotion status at the end of each academic term.
2. Once a student has been accepted into the First or Second Degree Bachelor of Social Work program, these regulations shall apply upon commencement of courses in the first semester of the program to the completion of the degree.
3. In addition to meeting the academic requirements and promotion regulations for the School, all students must meet the general academic regulations (undergraduate). For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).

### 7.2 Promotion Status

A student's promotion status at the end of each term will be in one of the following three categories:

### 7.2.1 Clear Promotion

Clear Promotion means that a student can proceed to the next term without restrictions. Clear Promotion will be given to a student

- who has completed the academic term with a numeric grade of at least $65 \%$ in each required course in the Bachelor of Social Work degree program from Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree);
- who has completed a practicum with a letter grade of PAS (pass); and
who has maintained professional behaviour consistent with the Memorial University of Newfoundland Student Code of Conduct, the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy \& Procedures, and the School of Social Work Social Media Policy and Guidelines for Social Work Students.


### 7.2.2 Probationary Promotion

Probationary Promotion means that a student has not received Clear Promotion and must meet certain conditions to obtain Clear Promotion. A student can only receive Probationary Promotion once in the Bachelor of Social Work program. The length of Probationary Promotion can be up to three terms. Each of the following violations is sufficient for a student to receive Probationary Promotion. Probationary Promotion will be given to a student

- who has completed the term with a numeric grade of less than $65 \%$ in one required course listed in Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree). In order to regain Clear Promotion and
meet the course prerequisites needed to proceed to the next semester, the student must do the following:
- If the required course is one of the Professional Education Courses listed in Table 2 or Table 3, the student must repeat the course and obtain a numeric grade of at least 65\%.
- If the required course is one of the General Education Courses from Table 1 Complementary Studies the student must complete the same course or another course listed for the corresponding Learning Objective and obtain a numeric grade of at least 65\%.
- who has behaved in a manner that breaches the Memorial University of Newfoundland Student Code of Conduct, the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy \& Procedures, and/or the School of Social Work Social Media Policy and Guidelines for Social Work Students but for which the School considers that withdrawal from the program is not warranted. The length of Probationary Promotion is up to three academic terms during which time the student is expected to comply with the penalties and/or conditions determined by the School or the University.


### 7.2.3 Promotion Denied

Promotion Denied means that a student has not received either a Clear Promotion or a Probationary Promotion and must withdraw from the School.

Any one of the following violations is sufficient for a student to receive Promotion Denied. Promotion Denied will be given to a student:

- who has not met the conditions of probation.
- who has received a numeric grade of less than $65 \%$ in more than one required course listed in Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree) and that were completed since the commencement of the Bachelor of Social Work program.
- who has received a numeric grade of less than $65 \%$ twice in the same required social work course listed in Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree). and that were completed since the commencement of the Bachelor of Social Work program.
- who has conducted themselves in such a manner as to cause the field agency and a Field Education Coordinator to terminate the field practicum or who has voluntarily withdrawn from a field practicum without the prior approval of a Field Education Coordinator and the Committee on Undergraduate Studies.
- who has received a letter grade of FAL (fail) in a field practicum.
- who has behaved in a manner that breaches the Memorial University of Newfoundland Student Code of Conduct, the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy \& Procedures, and/or the School of Social Work Social Media Policy and Guidelines for Social Work Students and for which the School or the University considers that withdrawal from the program is warranted.


### 7.2.4 Other Information

1. Following a denial of promotion, a student can apply as a new applicant to the School of Social Work in accordance with Calendar requirements for the year in which admission is being sought as indicated under Admission Regulations for the School of Social Work, Admission Following Promotion Denied.
2. A student who is denied promotion and required to withdraw from the program a second time will not be eligible for future admission to the program.

### 7.3 Leave of Absence

1. A leave of absence can only be requested after a student completes the first semester of the program.
2. Any student who requests to take a leave, for any reason, from the program and retain status in the program may normally do so once, with the written approval of the Committee on Undergraduate Studies, and for a maximum period of one academic year. A student who plans to resume studies within the one year period must notify the Dean in writing three months prior to the beginning of the term in which the student plans to continue in the program. A student who does not return at the end of their approved leave of absence will be deemed to have withdrawn from the program.

### 7.4 Student Withdrawal

1. A student who voluntarily withdraws at any time from the program and who wants to return to the program can apply as a new applicant to the School of Social Work in accordance with Calendar requirements for the year in which admission is being sought as indicated under Admission Regulations for the School of Social Work, Admission Following Voluntary Withdrawal.
2. The School reserves the right to require a student to withdraw from the program at any time when acceptable cause is demonstrated.

## 8 Graduation

1. In order to graduate, students in the First Degree program who completed any Complementary Studies courses listed for Year 2 and Year 3 of Table 2 Bachelor of Social Work (as a First Degree) prior to admission and received a grade of less than $65 \%$ in these courses are required to repeat the courses or take other courses that meet the same learning objective(s) according to Program Regulations and achieve a grade of at least $65 \%$ in each course.
2. Upon meeting the qualifications for the Bachelor of Social Work program a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained online at the Memorial Self Service. Additional information is available from the Office of the Registrar.

## 9 Waiver of School Regulations

Every student has the right to request waiver of School regulations. A student wishing waiver of University academic regulations should refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations.

### 9.1 General Information

1. The School reserves the right in special circumstances to modify, alter, or waive any School regulation in its application to individual students where merit and equity so warrant in the judgment of the Committee on Undergraduate Studies of the School.
2. A student requesting a waiver of a School regulation must submit the request in writing to the Chair of the Committee on Undergraduate Studies. Medical and/or other documentation to substantiate the request must be provided.
3. Any waiver granted does not reduce the total number of credit hours required for the degree.

## 10 Appeal of Regulations

Any student whose request for waiver of School regulations has been denied has the right to appeal. For further information refer to UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions.

## 11 Course Descriptions

In accordance with Senate's Policy Regarding Inactive Courses, the course descriptions for courses which have not been offered in the previous three academic years and which are not scheduled to be offered in the current academic year have been removed from the following listing. For information about any of these inactive courses, please contact the Dean of the School.
All courses of the School are designated by SCWK.
1710 Social Work Philosophy and Practice provides an overview of the historical development, philosophical orientation, basic values, principles and knowledge base, and fields of practice of the profession. The course will examine critical social problems that impact societies with an emphasis on the quest for social justice at local, national and global levels.
CR: the former SCWK 2700
2211 Diverse Theories for Social Work Practice provides an overview of critical and practice theories that explain problems and guide the change process. The course will involve students in a critical analysis of a broad range of theories including: Critical theories such as structural, feminist, Marxist, anti-racist, Aboriginal, queer and anti-oppressive practice; modern theories such as interactional, systems, ecological cognitive \& crisis theory/ intervention; postmodern theories such as solution focused and narrative; and macro practice, social action, and community organization.
PR: admission to the Bachelor of Social Work First or Second degree
program and SCWK 1710 or the former SCWK 2700
230A/B Field Practicum Preparation Seminars expose students to both theoretical and practical aspects of field education in general and the field practicum specifically prior to the first field placement. The seminars will utilize a combination of lectures, guest speakers, panel discussions, and practical exercises to prepare students for their field practicum. Students must complete and receive a passing grade for SCWK 230A in order to proceed to 230B. Students who do not meet this requirement will not pass SCWK 230B and will be delayed in starting their field practicum. SCWK 230A and 230B will each be will be evaluated as PAS or FAL based on attendance, participation, and assignments.
AR: attendance is required in all seminars of this courses CH: 0
LC: as scheduled
2313 Social Work Knowledge and Skills for Group and Team Work (same as the former SCWK 4313) introduces students to social work methods and skills in group practice and team work. The design and implementation of diverse group types, evaluative models and the parallels between group and team functions are explored. The characteristics and challenges of interdisciplinary team work are considered as well as effective strategies and unique roles that social workers can contribute for effective team collaboration.
CR: the former SCWK 4313 and the former SCWK 4320
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520 and successful completion 6 credit hours in Complementary Studies courses from Learning Objectives 3 and/or 4 as outlined in Table 2 Bachelor of Social Work as a First Degree; or admission to the Bachelor of Social Work Second Degree Program, SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520; SCWK 4312, and SCWK 4314

2320 Social Work Knowledge and Skills for Assessment and Intervention introduces beginning skills for social work practice. The relevance of relationship based approach, a strengths perspective and an anti-oppressive stance will be considered as students acquire biopsychosocial assessment and interviewing skills. Attention is given to self-awareness, professional identity and a wide range of beginning counselling skills with diverse populations and situations such as: Aboriginal people, involuntary clients, suicide risk, domestic violence, clients in crisis and children at risk.
CR: the former SCWK 3320, the former 3321 and the former 4310
PR: admission to the Bachelor of Social Work First or Second Degree
Program and SCWK 1710 or the former SCWK 2700
2321 Social Work Knowledge and Skills for Personal and Social Change addresses knowledge, skills and competencies that enable the social worker to facilitate positive change within the middle and end stages of intervention. Emphasis will be given to a range of current best known
practices within the context of clinical and community applications, promotion of social justice, strengths and critical thinking. General practice approaches that may be applied with individuals, families and communities will be emphasized.
CO: SCWK 2313 and SCWK 2711; or admission to the Second Degree program option
CR: the former SCWK 3421
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520 and successful completion 6 credit hours in Complementary Studies courses from Learning Objectives 3 and/or 4; or admission to the Bachelor of Social Work Second Degree Program, SCWK 230A, SCWK 2211, SCWK 2320 and SCWK 2520; SCWK 4312, and SCWK 4314

2520 Social Work: Critical Analysis of Social and Health Policy engages students in critical analysis of local and national social and health policy development from a social work perspective. The course explores topics that are relevant to direct service provision such as: the influence of historical context on policy, policy development, interactions among federal, provincial and local governments that influence policy and leadership and advocates roles of social workers in program development in a diverse and changing environment.
CR: the former SCWK 2510 and 2710
PR: admission to the Bachelor of Social Work First or Second Degree Program and SCWK 1710 or the former SCWK 2700
2711 Social Justice and Social Work Practice explores human rights from global perspective and examines social responsibility, the nature of oppression and marginalization and strategies to promote social justice and prevent injustice. Reflective practice principles and experiential activities will form the basis for examining use of self and the relevance of social location, and the application of: critical theoretical perspectives, critical empathy and ethical evaluation for anti-oppressive practice at the individual and structural/ organizational level.
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520 and successful completion 6 credit hours in Complementary Studies courses from Learning Objectives 3 and/or 4; or admission to the Bachelor of Social Work Second Degree program, SCWK 230A, SCWK 2211, SCWK 2320 and SCWK 2520; SCWK 4312, and SCWK 4314
3221 Social Impacts on Human Development addresses how theories, concepts and information related to human development must be considered in the context of social issues and impacts in order to inform social work practice with vulnerable populations. The impact of issues such as violence, addictions, poverty, trauma and oppression are examined as are strengths and resilience of human beings. Strategies to address social impacts on human development are explored.
CR: the former SCWK 3211 and the former SCWK 3220
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 3300 and 3311

3300 Social Work Field Practicum 1 is a 350 hour supervised field experience that provides students with opportunities to apply social work principles, theories and skills to work with clients and communities. The field experience is designed to develop: professional use of self, beginning ability to implement planned interventions with diverse populations and an appreciation for social justice activities.
CH: 12
CR: the former SCWK 4315, the former 4316, the former 4300, the former 4325, and the former 4326
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 230A/B, SCWK 2313, SCWK 2321, SCWK 2711 and 6 credit hours in each of Complementary Studies Learning Objectives 3 and 4; or admission to the Bachelor of Social Work Second Degree program, SCWK 230A/B, SCWK 2313, SCWK 2321, SCWK 2711, SCWK 3410, and SCWK 3720

3311 Social Work Knowledge and Skills for Integration of Theory and Practice focuses on application of selected models and methods of practice. The course explores links between theory and practice through critical consideration of: the influence of agency and community, the value of theory and knowledge, the role of self awareness, social location and practice skills. Topics to be explored include: documentation, support/resource counselling, advocacy, self care, vicarious trauma, professional identity, community work, interdisciplinary practice, group work, ethics and consultation.
CO: SCWK 3300

[^30]
## CR: the former SCWK 4310 and SCWK 4311

3410 Applied Research and Evaluation for Social Work Practice (same as the former SCWK 4410) teaches theories, concepts and methods of systematic inquiry and its relationship to professional social work judgment and action. The contribution of applied research to social justice, community based inquiry and accountability and evidence based practice is emphasized. Topics to be explored include: quantitative, qualitative, action and evaluative approaches to systematic inquiry for social work practice; ethical considerations in social work research.
CR: the former SCWK 4410, the former SCWK 4420, and the former SCWK 4421
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 3300 and SCWK 3311; or admission to the Bachelor of Social Work Second Degree Program, SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520, SCWK 4312, and SCWK 4314

3720 Ethical and Legal Issues in Social Work Practice examines ethical theories, decision - making models and key legislation in a variety of areas including child welfare, youth justice, privacy, health, human rights to resolve dilemmas in practice. Components of legislation and the Social Work Code of Ethics are analysed to determine approaches to practice dilemmas. Consideration and critical analysis of frameworks for decision making will lead to a personal model for practice choices.
CR: the former SCWK 5720
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 3300 and SCWK 3311; or admission to the Bachelor of Social Work Second Degree Program, SCWK 230A, SCWK 2211, SCWK 2320, SCWK 2520, SCWK 4312, and SCWK 4314

4302 Social Work Practicum 2 is a 350 hour supervised field experience that provides students with opportunities to apply social work principles, knowledge and skills that demonstrates the capacity for independent practice at micro and macro levels. Emphasis is on developing strong analytical abilities, applying enhanced practice skills, mastering a variety of social work roles, implementing strategies that impact social justice and making professional judgments in increasingly complex situations.
CH: 12
CR: the former SCWK 5300, the former SCWK 5301, and the former SCWK 5315-5319
PR: admission to the Bachelor of Social Work First Degree Program, SCWK 4312, SCWK 4314, SCWK 4317, SCWK 4521, and SCWK 4620; or admission to the Bachelor of Social Work Second Degree Program, SCWK 3300 and 3311
4312 Social Work Knowledge and Skills for Community Development emphasizes theory and practice of community organizing and community development within the context of social justice. Frameworks for community practice are critically analysed through examination of ethical dilemmas, accountability issues, practice skills, leadership and other roles. Urban, rural and cultural differences are considered in relation to their influence on effective community organizing and development work.
CR: the former SCWK 5322
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 3221, SCWK 3410, SCWK 3720, and successful completion of 3 credit hours in each of Complementary Studies Learning Objective Two and Six; or admission to the Bachelor of Social Work Second Degree Program, and SCWK 1710 or the former SCWK 2700
4314 Social Work Knowledge and Skills for Practice with Families prepares students to offer direct services to families through increasing their knowledge of family functioning and their competence in family assessment and intervention. Critical analysis of models of family intervention and exploration of ethical issues form the basis for application of selected approaches to family work including: structural therapy, solution focussed approach and crisis intervention.
CR: the former SCWK 5325
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 3221, SCWK 3410, SCWK 3720, and successful completion of 3 credit hours in each of Complementary Studies Learning Objective Two and Six; or admission to the Bachelor of Social Work Second Degree Program, and SCWK 1710 or the former SCWK 2700
4317 Field of Practice: Child Welfare Prevention, Crisis Intervention and Protection examines legislation that protects the rights of children, best
practice in child welfare and care and protection of children within a community context. Social work intervention with complex issues such as: family violence, poverty, cultural influences, addictions and mental health impacts are explored through feminist, Aboriginal, empowerment and antioppressive perspectives. Continuity of care, permanency planning and the impact of separation are addressed through critical analysis of child welfare programs, and care giving models.
CR: the former SCWK 4614
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 3221, SCWK 3410, SCWK 3720, and successful completion of 3 credit hours in each of Complementary Studies Learning Objective Two and Six

4321 Field of Practice: Social Work in Child Abuse and Protection is aimed at developing knowledge and social work skills necessary for intake, crisis intervention, assessment, family support, removal, community placement, family reunification, and amelioration, within the context of social justice and the best interest of those most vulnerable for maltreatment and oppression. It addresses child-youth neglect, physical abuse, sexual abuse, emotional abuse, exploitation, problems, risks, needs and harm and includes trauma and developmental impacts.
CO: SCWK 4302
CR: the former SCWK 5328
4322 Field of Practice: Social Work in Gerontology reviews aging from a biopsychosocial perspective with an emphasis on the strengths of seniors and the impact of oppression on the lives of the elderly. The course will explore legislation, policies, societal trends and elder abuse, and consider the social work role in developing strategies for healthy aging and service provision for seniors
CO: SCWK 4302
CR: the former SCWK 4615 and the former SCWK 5615
4323 Field of Practice: Social Work in Addictions is aimed at developing knowledge skills, and beginning competence, necessary for assessment and intervention with populations experiencing problems and risks associated with the use and abuse of chemicals and non-chemical addictions throughout the lifespan. Themes addressed include: the oppression of addictions; social determinants of addictions, the social worker's role in the continuum of care; strengths; the special needs of women, Aboriginal, and GLBT populations.

## CO: SCWK 4302

CR: the former SCWK 4616
4521 Social Work Organizational Development for Community Services (same as the former SCWK 3521) examines policy development and change in human services organizations and their administration. Management and organizational concepts suitable for the administration of social policies and programs are addressed as are ethical and ideological issues for social workers on human service teams. A focus on beginning skills in administration is included for the social worker within a management and leadership context in human services organizations.
CR: the former SCWK 3110, the former SCWK 3510, the former SCWK 3521, and the former SCWK 4111
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 3221, SCWK 3410, SCWK 3720, and successful completion of

- 3 credit hours in each of Complementary Studies Learning Objective

Two and Six; or admission to the Bachelor of Social Work Second Degree Program, SCWK 3300 and SCWK 3311

4620 Field of Practice: Social Work in Interdisciplinary Mental Health and Health Services provides an overview of mental health and illness, the impact on people and communities and social work interventions within an interdisciplinary community context. The oppression of illness, disability and mental health problems across the lifespan is considered as well as the role of social work in the continuum of care. Topics include: mental health, health, mental illness, disability, social determinants of health, social movements and advocacy.
CR: the former SCWK 4610, the former SCWK 5610, and the former SCWK 5613
PR: admission to the Bachelor of Social Work First Degree Program, and SCWK 3221, SCWK 3410, SCWK 3720, and successful completion of 3 credit hours in each of Complementary Studies Learning Objective Two and Six


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www.mun.ca/sgs/contacts/sgscontacts.php

## Associate Vice-President (Academic) and Dean of Graduate Studies

Surprenant, A.M., B.A. New York, M.S., Ph.D. Yale; Professor, Department of Psychology
For an up-to-date listing of personnel and graduate officers see www.mun.ca/sgs/contacts/sgscontacts.php

## 1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled The Memorial University of Newfoundland Code, which articulates the University's commitment to maintaining the highest standards of academic integrity.

## 2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The Student Code of Conduct outlines the behaviors which the University considers to be nonacademic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined under General Regulations - Academic Misconduct in the University Calendar.
For more information about the Student Code of Conduct, see www.mun.ca/student.

## 3 General Information and Regulations Governing All Graduate Students

### 3.1 School Description

Memorial University of Newfoundland's School of Graduate Studies (SGS) is home to over 3,500 graduate students enrolled in over 100 graduate diploma, and master's and doctoral degree programs.
The School is a central agency responsible for the collection, maintenance, and distribution of materials on graduate students. It maintains graduate files and administers graduate applications, admissions, comprehensive examinations, thesis examinations, and doctoral defences. SGS is also responsible for registrarial functions, graduate enrolment management, and recruitment, and administers graduate student funding including assistantships, exterhal and internal scholarships, baseline fellowships, supervisor support, and Tricouncil global payments.
The School assists academic units in developing new program proposals and administers their approval. Through its Academic Council, SGS also provides a forum for representatives from all faculties, schools, and the Graduate Students' Union to discuss matters pertaining to graduate education. The Council ensures maintenance of standards across all graduate programs by considering policies relating to graduate studies, approving regulation changes and appeals, receiving reports from standing and ad hoc committees, and making recommendations on matters affecting graduate studies.
Additional information regarding the School of Graduate Studies is available at www.mun.ca/sgs.
Students must meet all regulations of the School in addition to the General Regulations, the Degree Regulations and any additional requirements of the appropriate Department.
For information concerning fees and charges, see the Financial and Administrative Services website at www.mun.ca/finance/fees/.
For information concerning scholarships, bursaries and awards, see www.mun.ca/scholarships/scholarships.

### 3.2 Programs

The following graduate diploma and degree programs are offered by Memorial University of Newfoundland. Interdisciplinary study is encouraged by the University, and prospective applicants should make enquiries about their interests from all the areas of study concerned.
Graduate students may enrol in certain graduate courses with the permission of the instructor and graduate officer of the academic unit offering the course, and the graduate officer of the student's home academic unit. For more information visit the School of Graduate Studies website under Graduate Studies, Interdisciplinary graduate courses.

### 3.2.1 Graduate Diplomas

## Business Administration

Graduate Diploma in Business Administration
Education
Diploma in Post-Secondary Studies (Health Professional Education)
Graduate Diploma in Education (Educational Leadership Studies)
Engineering
Graduate Diploma in Engineering
Fisheries and Marine
Graduate Diploma in Marine Studies (Fisheries Resource Management)
Humanities and Social Sciences
Graduate Diploma in Humanities and Social Sciences
Medicine
Graduate Diploma in Medicine (Clinical Epidemiology)
Graduate Diploma in Medicine (Community Health)
Nursing
Graduate Diploma in Nursing (Post Master's Nurse Practitioner)

### 3.2.2 Graduate Degrees

Master of Applied Science
Master of Applied Psychological Science (Co-operative)
Master of Applied Statistics
Master of Arts
Master of Arts and Education (Education and Francophone Literatures and Cultures)
Master of Business Administration
Master of Education
Master of Employment Relations
Master of Engineering
Master of Environmental Science
Master of Fine Arts
Master of Gender Studies
Master of Health Ethics
Master of Marine Studies
Master of Maritime Management
Master of Music
Master of Nursing
Master of Occupational Health and Safety
Master of Philosophy
Master of Physical Education
Master of Public Health
Master of Science
Master of Science in Boreal Ecosystems and Agricultural Sciences
Master of Science in Kinesiology
Master of Science in Management
Master of Science in Medicine
Master of Science in Pharmacy
Master of Social Work
Master of Technology Management
Doctor of Philosophy
Doctor of Psychology

### 3.3 Definition and Explanation of Terms Used in this Calendar

### 3.3.1 Special/Selected Topics Courses

Where a block of courses has been approved under a general heading such as selected topics, special areas, directed readings or like heading, each new course offered from that block of courses shall be approved in advance by the Faculty/School Council (or delegated Graduate Studies Committee). To ensure an orderly use of the courses and non-duplication between course numbers, titles and contents, the Council (or Committee) shall require the same quality and type of information as is needed for the approval of a regular course. (Consult the School of Graduate Studies or Deputy Registrar for administrative procedures.)

### 3.3.2 Associate Vice-President (Academic) and Dean of Graduate Studies

In all regulations following, reference to the "Associate Vice-President (Academic)" and the Dean of Graduate Studies, "the Dean" refers specifically to the Dean of Graduate Studies.

### 3.3.3 Credit Hour

A credit hour is the measure used to reflect the relative weight of a given course towards the fulfilment of appropriate degree, diploma, certificate, major, minor, or other program requirements Normally, a course has a credit value of 3 credit hours. A weight of one credit hour normally means that the course meets for lectures one hour per week for the duration of a semester or two hours per week for the duration of a session. The number of hours of required instruction, outside of lecture time, such as laboratory instruction, tutorials, etc. may or may not impact on the number of credit hours assigned to a particular course and academic units may recommend to the Senate a greater or lesser whole number of credit hours for a particular course.

### 3.3.4 Graduate Course

1. A graduate course comprises a unit/units of work in a particular subject normally extending through one semester, the completion of which carries credit toward the fulfilment of the requirements for a postbaccalaureate degree, diploma, or certificate.
2. Accelerated courses are not normally permissible in graduate programs.
3. Courses required as part of a graduate student's program are known as program courses. Tuition for such courses is covered by the semester fee.
4. Courses which are not required as part of a graduate student's program are known as non-program courses. Students registering for such courses will be required to pay the appropriate per-course fee.

### 3.3.5 Policy Governing the Auditing of Courses

1. In order to audit any course, an individual must receive permission from the instructor in that course, the Supervisor/advisor, and the administrative Head of the unit in which the course is offered. Matters to be considered shall include class size, impact on students registered for credit, and other factors judged relevant by the academic unit. Permission cannot be given until the number of registrations for credit is known.
2. Individuals auditing courses shall limit their participation to that deemed appropriate by the instructor; auditors are not permitted to write formal examinations, nor to have their work formally assessed.
3. Students who require a testamur of audition may request the same from the instructor of the course. Students will not register for audit courses nor will a record of audit courses appear on students' transcripts.

### 3.3.6 Semester

A semester means a period of approximately 14 consecutive weeks during which the University is in regular session and in which period there are at least 12 teaching weeks as defined by the Senate. Normally the Fall semester commences in early September, the Winter semester in early January, and the Spring semester in early May.

### 3.3.7 Academic Year

The academic year is from September 1 of one year to August 31 of the following year.

### 3.3.8 Graduate Student

A graduate student is one who has been admitted to a graduate degree or a graduate diploma program.
A full-time graduate student is one who registers as such, devotes full time to the student's academic program and may not commit more than 24 hours a week working time, including teaching assistant or research assistant duties, to matters other than the degree program. A part-time graduate student is one who is registered for the duration of a semester and is not classified as full-time.

### 3.3.9 Visiting Graduate Student

1. A student who is registered in good standing in a graduate program at another recognized institution who comes to Memorial University of Newfoundland to conduct research under the supervision of Memorial University of Newfoundland faculty members is considered to be a visiting graduate student. In order to obtain access to University resources such a student will be required to register each semester of their visit for GRAD 9900 using a Course Change Form.
2. To be eligible to register, a visiting graduate student must submit an Application for Admission form to the School of Graduate Studies, accompanied by: a) a letter from their home institution verifying graduate student status, and b) a letter from the host faculty member confirming the duration of the visit. The student will then be admitted to the School of Graduate Studies to a "non-degree" program.
3. Visiting graduate students will be exempt from tuition fees. However, all visiting graduate students will be required, as a condition of registration, to purchase health insurance (international students should contact the International Student Advisor, whereas Canadian citizens or permanent residents of Canada should contact the Graduate Students' Union for more information). If a visiting graduate student wishes to register for a course while at Memorial University of Newfoundland, the student must meet the University admission requirements and pay the undergraduate per course fee as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/.
Note: A student enrolled in a graduate program at another university who wishes to complete courses at Memorial University of Newfoundland for transfer of credit to the student's home institution is not considered to be a visiting graduate student under this definition. Such students should apply to the Office of the Registrar for admission to the University, and if admitted, will be governed by GENERAL ACADEMIC REGULATIONS. Fees will be assessed in accordance with the fee schedule for undergraduate courses as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/.

### 3.3.10 Program

1. A program, whether it comprises courses only, courses and comprehensive examination, or courses, internship, project, thesis research, paper folio is defined for each graduate student in accordance with Departmental and University Regulations. Each program of study is recommended by the appropriate academic unit, and must be approved in writing by the Dean of Graduate Studies before the beginning of the graduate student's second year of study.
2. Responsibility for the administration of the program shall rest with the Dean acting on behalf of the School.

Note: The following general statements concerning admission and Degree requirements should be supplemented by the detailed regulations governing each program.

### 3.3.11 Collaborative Program Agreements

### 3.3.11.1 Integrated Pathway Âgreements

1. Memorial University of Newfoundland supports the establishment of agreements with partner institutions that may lead to the completion of multiple degree programs through an integrated pathway.
2. Examples of such agreements include but are not exclusive to $3+1+1$ and $3+1+2$ arrangements whereby an undergraduate degree is awarded by the partner institution and the graduate degree is awarded by Memorial University of Newfoundland.
3. In the $3+1+1$ arrangement, a student would complete 3 years of the undergraduate studies at the partner institution, finish the 4 th year at Memorial University of Newfoundland, and earn the bachelor's degree at the partner institution. The student would then enroll in and complete a 1-year master's program and earn a master's degree at Memorial University of Newfoundland.
4. In the $3+1+2$ arrangement, a student would complete 3 years of undergraduate studies at the partner institution, finish the 4th year at Memorial University of Newfoundland, and earn the bachelor's degree at the partner institution. The student would then enroll in and complete a 2-year master's program and earn a master's degree at Memorial University of Newfoundland.
5. All such agreements must comply with the general regulations governing undergraduate and graduate programs at Memorial University of Newfoundland.
6. Memorial University of Newfoundland's Guidelines for Integrated Pathway Agreements provides details on the method of establishing such an agreement. The Guidelines are available from the School of Graduate Studies.

### 3.3.11.2 Cotutelle Agreements

1. Memorial University of Newfoundland offers graduate students the opportunity to carry out a joint research project through a cotutelle agreement between Memorial University of Newfoundland and another recognized institution. The student would be expected to participate in research and fulfill degree requirements at both institutions. Students who successfully complete all program requirements would earn doctoral degrees from both institutions. Memorial University of Newfoundland's Guidelines for Cotutelle Agreements, approved by the Academic Council of the School of Graduate Studies, provides information on the details on the method of establishing such an agreement and program. The Guidelines are available from the School of Graduate Studies.
2. Upon successful completion of the program, Memorial University of Newfoundland and the cooperating institution will each issue its own doctoral degree certificate. On the certificate and subsequently on the university transcript, the following notation will be added: "This Ph.D. was awarded within a cotutelle agreement. The student was jointly enrolled at University XYZ and Memorial University of Newfoundland and successfully completed the degree requirements of both institutions."
3. Graduate students interested in this type of program should contact the School of Graduate Studies for further information.

## 4 General Regulations

### 4.1 Qualifications for Admission

### 4.1.1 Graduate Diploma Programs

To be considered for admission to a Graduate Diploma program the minimum requirements will normally be a second-class degree in an appropriate area of study from a university of recognized standing.
A student admitted to a Graduate Diploma program, who has demonstrated to the satisfaction of the appropriate Faculty/School/ Department an ability to pursue research at the master's level, may be permitted subsequently to transfer candidature to that of a master's in the affiliated program area and will thereafter be awarded only the master's at the end of the candidature.

### 4.1.2 Master's Programs

To be considered for admission to a Master's program, the minimum requirements will normally be a second-class degree in an appropriate area of study from a university of recognized standing.
In exceptional cases, and upon the recommendation of the appropriate academic unit, students who apply for admission and do not meet the minimum admission requirements to a Master's program described above may be considered for a qualifying year. Academic units will make recommendations for the qualifying year, including the appropriate courses to take during this period, to the School of Graduate Studies at the time of admission assessment.

### 4.1.3 Ph.D. and Psy.D. Programs

1. To be considered for admission to a Ph.D. program, the minimum requirements will normally be a Master's degree from a university of recognized standing, in an appropriate area of study. Other students may be considered for admission to a Ph.D. program provided that:
a. they have been registered in a Master's program for a minimum of 12 months, and have demonstrated to the satisfaction of the Faculty/School/Department concerned their ability to pursue research at the Doctoral level. Such transfer should take place no later than the 5th semester of the student's Master's program as indicated as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/; or
b. they hold a Bachelor's Degree with Honours, or equivalent, from a university of recognized standing, and that the Faculty/ School/Department is satisfied of the students' ability to pursue research at the Doctoral level.
2. To be considered for admission to the Psy.D. program, the minimum requirements will normally be an undergraduate honours degree in Psychology that includes senior courses as indicated under the Regulations Governing the Degree of Doctor of Psychology.

### 4.1.4 Applicants Not Meeting Qualifications

Only in exceptional circumstances, and only upon the recommendation of the Faculty/School/Department concerned, will the Dean consider applicants who do not meet the requirements outlined in Qualifications for Admission, Master's Programs, or Ph.D. and Psy.D. Programs.

### 4.1.5 English Proficiency Requirements

Since English is the primary language of instruction at this University, all applicants seeking admission to the School of Graduate Studies must possess an adequate knowledge of written and spoken English as a prerequisite to admission. Regardless of country of origin or of citizenship status, applicants will be required to demonstrate proficiency in the English language. This demonstration may take one of the following forms:

1. Successful completion of the equivalent of three years of full-time instruction in an English language secondary institution as recognized by Memorial University of Newfoundland including successful completion of at least two courses in English at the Grade XII (or equivalent) level. Please note that these courses must be other than English as a Second Language (E.S.L.) courses.
2. Successful completion of a baccalaureate degree from a recognized University where English is the language of instruction and from which transfer of credit may be allowed by Memorial University of Newfoundland.
3. Successful completion of a post-graduate degree program at a recognized University where English is the language of instruction and from which transfer of credit may be allowed by Memorial University of Newfoundland.
4. Submission of official results of the Test of English as a Foreign Language (TOEFL) with a paper-based score of 550 (or higher)/computer-based score of 213 (or higher) or Internet-based with a score of 80 (or higher) and the Test of Written English (TWE) with a score of 4 (or higher).
5. Submission of the official results of the Michigan Test of English Proficiency with a score of $85 \%$ (or higher).
6. Submission of the official results of the English Language Testing Service (ELTS) Test with an average band score of 6.5 or higher. Submission of official results of the Canadian Academic English Language (CAEL) Assessment with a minimum score of between 50 and 60 in each of four bands, with at least 2 band scores of 60.
7. Submission of official results of the Canadian Test of English for Scholars and Trainees (CanTEST) with a Band Level 4.5 in the listening comprehension and reading comprehension sub-tests and a score of 4 in writing.
8. Submission of official results of the Pearson Test of English Academic (PTE Academic) with minimum scores of 58 in each of reading, writing, listening, and speaking.
9. Only in exceptional circumstances and only upon the recommendation of the Department/Faculty/School concerned, will the Dean consider applicants who do not meet one of the requirements listed in 1.-9. above.

### 4.1.6 Additional Requirements

Particular Departments/Faculties/Schools may require greater strength in English communicative skills than is indicated by the achievement of minimum scores outlined in 4., 5., 6., 7., 8., and 9. above. Any such additional requirements are detailed in the appropriate section of the Calendar.

### 4.1.7 English Language Requirements Subsequent to Admission

1. Students who have been admitted under English Proficiency Requirements, Clauses 4.-9. above, will be required to take an English language placement test on arrival at Memorial University of Newfoundland. On the basis of the test results, students may be required to complete successfully a course of language study designed to bring their English, in any or all of listening, speaking, reading, and writing, to a level required for graduate studies. A final assessment of the students' proficiency in these areas will normally be made no later than the end of the third semester following their first registration in the School of Graduate Studies. As a result of this assessment, and in consultation with the student's academic unit and the Department of English, there may be a recommendation for termination of the student's program.
2. Notwithstanding Additional Requirements above, if a student's Department is not satisfied with the student's ability to communicate in English, then the student may be required to complete successfully the relevant component(s) of the course of study referred to in Additional Requirements. The Department will be required to take this action within three semesters of the student's admission to a graduate program. At the end of this period the Department may recommend, but not require this procedure.
Note: Information regarding the TOEFL program is available on-line at www.toeflgoanywhere.org/. Information regarding the Michigan Test of English available on-line at www.michigan-test.com. Information regarding the ELTS Test is available on-line at www.ielts.org.

### 4.1.8 Foreign Degree Transcripts

Students who have completed undergraduate programs at universities which issue documents in languages other than English or French shall submit notarized English translations of all supporting documentation, including, but not limited to, transcripts, degrees, and diplomas.

### 4.2 Procedure for Admission

1. Application for admission to graduate studies must be made online to the School of Graduate Studies at www.mun.ca/become/ graduate/apply. The application must be supported by an official transcript of the applicant's university record. If the applicant is a graduate of another university or college, a copy of the Calendar of that institution must be included upon request.
Most graduate programs have September start dates; however, some programs accept students for January and/or May admission. Deadlines for submission of applications can be as early as November for the following September; therefore, applicants should inquire about program start dates and application deadlines of the academic program of interest (see www.mun.ca/become/ graduate). Non-Canadian applicants should allow four to six months for processing of official documents with Immigration authorities.
2. Admission to graduate studies shall be upon acceptance by the Dean after assessment of the qualifications of the applicant but no applicant will be admitted unless the academic unit of specialization recommends acceptance along with a proposed program of study and a proposed Supervisor or advisor or, where appropriate, a tutor. Successful applicants will be notified by the Dean of Graduate Studies.
3. The applicant may be required to appear for an interview before a final offer of admission is made.
4. It is recommended that the applicant refer to the appropriate section of this Calendar to ascertain if additional testing information or documentation is required when making initial application.
5. The University reserves the right to refuse admission to any applicant.

### 4.3 Registration

### 4.3.1 Program Registration

1. All graduate students must be registered in each semester for the graduate program registration appropriate to their discipline (see note) until all academic requirements for the degree have been met, except during periods for which leaves of absence have been granted (see Leaves of Absence).
Note: e.g., Linguistics 9000, Chemistry 9000 or, in the case of Medicine, Medicine 9900.
2. A student registered in a graduate diploma, Master's, Ph.D., or Psy.D. program may not concurrently pursue studies leading to any other degree without the prior approval of the Dean.

### 4.3.2 Program Withdrawal

Students intending to withdraw from their program must inform the Dean of Graduate Studies in writing. The period of withdrawal from a program without incurring liability for that semester's fees is three weeks after the first day of lectures in the semester in question, as stated in the University Diary. Requests received after the end of the regular registration period, and approved, will be charged an administration fee as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/.

### 4.3.3 Course Registration

Note: For interdisciplinary programs, the Head of the academic unit is the Dean or Director of the Faculty/School administering the program.

1. Students will register for courses at the times indicated in the University Diary.
2. Students not admitted to a graduate program may enroll in graduate courses with the permission of the Head of the appropriate academic unit.

### 4.3.4 Changes in Course Registrations

Note: For interdisciplinary programs, the Head of the academic unit is the Dean or Director of the Faculty/School administering the program.

1. Within two weeks following the first day of lectures in any semester, as stated in the University Diary, a graduate student may, upon the approval of the appropriate Head of academic unit, add a course or courses to the student's registration for that semester.
2. Within eight weeks after the first day of lectures in any semester, as stated in the University Diary, a graduate student may, upon the approval of the appropriate Head of academic unit, drop a course or courses from the student's registration for that semester without prejudice.
3. After the period described in 2. above has expired, and up until the last day of lectures, any student who is prevented from completing a course by illness, bereavement or other acceptable cause, duly authenticated in writing may, upon the recommendation of the Head of the appropriate academic unit, drop that course without academic prejudice.
Note: A course cannot be dropped after the last day of lectures without the approval of the Dean of Graduate Studies.

### 4.3.5 Period of Study

1. Each student in graduate studies shall spend such time in the program as decided by the academic unit of specialization and approved by the Dean, and be subject to the following minimum residency.
a. Except where provided for elsewhere in this calendar, each student for a Master's Degree shall normally spend at least two semesters in residence as a graduate student at this University.
b. Except where provided for elsewhere in this calendar, each student for a Ph.D. or Psy.D. shall normally spend at least three semesters in residence as a graduate student at this University.
c. To be resident as a graduate student of this university a student must be registered as a graduate student at Memorial University of Newfoundland and participate in a community of learners and instructors (formally or informally) who are joined together by the practices and standards of a profession or an academic discipline. For most students this will involve taking courses or engaging in research while resident on campus. These attributes may, however, be found elsewhere and it is possible therefore that the residency requirement may be satisfied in an off campus location. In such cases the Dean of Graduate Studies must be satisfied that the attributes are met.
d. Except where provided for elsewhere in this Calendar, each student for a graduate diploma shall normally spend at least one semester in residence as a graduate student at this University.
2. The maximum period of a graduate program shall be seven years beyond first registration.

### 4.3.6 Leaves of Absence

### 4.3.6.1 General

1. A leave of absence is a period of time during which a student is not required to register; no fees are assessed; and the time granted is not counted in the maximum time period permitted for a graduate program (see Period of Study)
2. In the event that circumstances prevent a student from pursuing the program, the student may apply to the Dean of Graduate Studies for a leave of absence.
3. A student may normally apply for only one leave of absence during the student's program. The maximum leave of absence shall normally not exceed 12 months.
4. An application for leave will normally be made before the end of the registration period in the first semester for which leave is requested. Requests received after the end of the regular registration period, and approved, will be charged an administration fee as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/.

### 4.3.6.2 Parental

A student may apply for a leave of absence in the case of pregnancy/birth/adoption of a child. (Such leave will be considered separately from 3. above.)

### 4.4 Program Requirements

Note: Every student shall complete a program of study as recommended by the Head of the academic unit, in consultation with the Supervisory Committee and approved by the Dean of Graduate Studies. See Procedure For Admission, Clause 2.

### 4.4.1 Graduate Diploma and Master's Programs

1. Students should consult the appropriate Department/Faculty/School regulations for information concerning the specific program requirements. Students wishing to take individual courses outside of their program of study must seek approval from the Head of their academic unit prior to registration.
2. Graduate diploma programs shall not normally comprise more than $50 \%$ of the master's in the same area.

### 4.4.2 Ph.D. and Psy.D. Programs

1. Each student is required to pass a comprehensive examination (see Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination)
2. Each student shall present a thesis embodying the results of original research.
3. Students should consult the appropriate Department/Faculty/School regulations for information concerning the specific program requirements. Students wishing to take individual courses outside of their program of study must seek approval from the Head of their academic unit prior to registration.
4. Students may pursue a specified part of their research elsewhere provided that prior permission has been obtained from the Dean on the recommendation of the Head of the academic unit in consultation with the Supervisory Committee.

### 4.4.3 English Writing Requirement

Given the analytical and scholarly demands of study at the graduate level, graduate students are expected to demonstrate an advanced facility with written English in meeting the demands of their course work and, where applicable, in the writing of any end-of-program research report, folio, comprehensive examination, or thesis.

### 4.4.4 Changes in Programs

Any changes in the students's program of studies must be approved by the Dean of Graduate Studies on the recommendation of the appropriate academic unit.

### 4.4.5 Research Involving Animals

Animal user training for any graduate student working with live vertebrate animals is mandated by the Canadian Council on Animal Care as a requirement for institutional accreditation. Supervisors are required to add the names of graduate students requiring such training to the relevant Animal Care Committee-approved research protocol by submitting an amendment form. Where a dedicated protocol will be developed for the student's project, a new protocol form must be submitted. Animal Care Committee approval is required in advance of students commencing animal work. Further information may be obtained by contacting acs@mun.ca or by telephone to (709) 777-6620.

### 4.4.6 Graduate Student Conduct

All graduate students shall adhere to Memorial University's policies and guidelines relating to academic scholarship, integrity, and ethical conduct informing the design, conduct, and reporting of responsible research.

### 4.4.7 Year of Degree and Departmental Regulations

1. A student completing a graduate degree program in the School of Graduate Studies will follow the degree and Faculty/School/ Department regulations in effect in the year in which the student first registers for the current program. However, students may elect to follow regulations introduced subsequent to their initial registration.
Note: The foregoing notwithstanding, in the case of students who have submitted a thesis/report/folio, or students in a non-thesis program who have taken a comprehensive examination, the option of changing regulations is no longer available.
2. When there is doubt as to which degree or Departmental regulations may be followed, the Academic Council of the School of Graduate Studies will decide which are the appropriate regulations.
3. Notwithstanding these guidelines, the University may place limits on the time permitted to complete a program under any given set of regulations. In addition, detailed scheduling of courses and/or work periods may be changed as the University deems appropriate or necessary.

### 4.4.8 Transfer of Course Credits

All such transfers require the approval of the Dean of Graduate Studies, on the recommendation of the Head of the appropriate academic unit.

1. A student who has successfully completed graduate courses at Memorial University of Newfoundland prior to admission to a graduate program may apply to transfer appropriate courses to that program, provided such courses have not been used to satisfy other Degree requirements.
2. A student who has successfully completed graduate courses as part of one graduate program at Memorial University of Newfoundland, and who is subsequently admitted to another program, may apply to transfer appropriate courses to the current program, provided such courses have not been used to satisfy other Degree requirements.
3. A student who has successfully completed graduate courses at another institution recognized by Senate may, on admission to a graduate program at Memorial University of Newfoundland, apply to transfer appropriate courses to the current program, provided such courses have not been used to satisfy other Degree requirements.
4. Students who successfully complete a graduate diploma program may transfer the course credits earned in that program towards a master's degree if these credits meet the requirements of the master's in the affiliated area in which the graduate diploma was granted.
5. In programs requiring a minimum of 12 credit hours or more, transfer of credit hours in graduate courses referred to in to in 1 ., 2 ., and 3 . above shall not exceed $30 \%$ of the total number of credit hours required. In programs requiring fewer than 12 credit hours, a maximum of 3 credit hours in graduate courses referred to in 1., 2., and 3. above shall be considered eligible for transfer.
6. Graduate courses referred to in 1., 2., 3., and 4. above shall not be considered eligible for transfer if they have been completed more than seven years prior to the date of admission into the current program.

### 4.5 Provision for Waiver of Regulations

Academic regulations notwithstanding, the University reserves the right in special circumstances, to modify, alter or waive any regulation in its application to individual students where, in the judgement of the appropriate University Officer or Committee, there is sufficient justification for doing so.

1. Waivers of course prerequisites/co-requisites may be granted by the Head of an academic unit.
2. Waivers of Departmental regulations may be granted by the Dean of Graduate Studies on the recommendation of the Head of an academic unit.
3. Requests for waiver of a degree or general regulation must be submitted to the Academic Council of the School of Graduate Studies.

### 4.6 Appeal of Decisions

### 4.6.1 General Information

1. Every graduate student has the right to appeal decisions resulting from the application of University regulations.
2. Appeals will be considered in the case of health issues, bereavement, and/or other acceptable cause, duly authenticated.
3. For assistance in the appeals process, a student is advised to consult with the School of Graduate Studies.
4. In preparing an appeal a student may consult advisors or facilitators. Such advisors or facilitators may include an international student advisor, a faculty advisor, a counsellor, a representative from the Memorial University of Newfoundland Graduate Students' Union (GSU), or a faculty member who is familiar with the appeals process and who is willing to undertake the role of student advisor or facilitator.
5. Appeals are made before specific committees that exist at the University to provide an objective review of cases. The appeals process is designed to assist students at critical points in their graduate program and to provide an accessible and transparent process for students. Refer also to Routes of Appeal of Academic Regulations for information concerning where appeals should be directed.
6. The principles of natural justice shall be applied to the appeals processes and decisions. These principles include, but are not limited to, such practices as all parties to the appeal receiving timely and adequate notice, all parties to the appeal having the opportunity to submit arguments and supporting documentation, and all parties to the appeal being made aware of the evidence considered by the committee. No person will sit in judgment on an appeal if that person has been previously involved in a decision-making process related to the matter under appeal or if that person has any conflict of interest, bias, or reasonable apprehension of bias.
7. While the University makes provision for students to appeal decisions made under University regulations, the academic, financial, or other consequences of the appeal process rests with the student.
8. When an appeal is denied, the student will be advised in writing of the reasons for the decision and if there are further steps that can be taken in the appeals process.
9. A student whose appeal is denied by the Appeals Committee of the School of Graduate Studies may appeal to the Senate

Committee on Academic Appeals. Academic units whose decisions are overturned by the Appeals Committee of the School of Graduate Studies may appeal to the Senate Committee on Academic Appeals. Decisions of the Senate Committee on Academic Appeals are final and within the University there is no further appeal.
10. Unless the student bringing the appeal requests otherwise, student appeals are heard anonymously by all committees except the Senate Committee on Academic Appeals.

### 4.6.2 Routes of Appeal of Academic Regulations

1. Normally, the responsibility for making an appeal before the appropriate committee of the University rests with the student.
2. A student who is ineligible to officially register for courses but who wishes to attend classes, laboratories, or other educational activities while an appeal is in progress can do so only with the written permission of the Head of the academic unit concerned. Such permission will not unnecessarily be withheld.
3. A student whose request for waiver of regulations has been denied may direct the appeal as described below.

- Appeals against decisions of the Head of an academic unit will be made directly to the Dean of Graduate Studies.
- Appeals against decisions of the Dean may be made to the Appeals Committee, School of Graduate Studies. Letters of appeal should be directed to the Chair of the Appeals Committee, c/o School of Graduate Studies.
- Appeals against decisions of the Executive Committee of the Academic Council may be made to the Appeals Committee, School of Graduate Studies. Letters of appeal should be directed to the Chair of the Appeals Committee, c/o School of Graduate Studies.
- Appeals against decisions of the Appeals Committee, School of Graduate Studies, may be made to the Senate Committee on Academic Appeals, c/o Office of the Registrar.


### 4.6.3 Route for Questioning Grades of Courses and Examinations

1. Appeals cannot be made on the basis of the grades awarded in individual courses, Comprehensive Examinations, or examinations of theses and reports.
2. Notwithstanding the above, and recognizing that the awarding of grades is an academic matter within the purview of experts in a discipline or subject area, a student who wishes to question the award of grades in individual courses is encouraged to consult with the following in the order given:

- the course instructor
- the Head of the appropriate academic unit
- the Dean of the appropriate Faculty/School, Associate Vice-President (Academic) of the Grenfell Campus or Vice-President of the Marine Institute.

3. A student who wishes to question the grade of a Comprehensive Examination, or the examination of a thesis or report, is encouraged to consult with the Dean of Graduate Studies.

### 4.6.4 Appeals to the School of Graduate Studies

1. All appeals must be made in writing, clearly stating the basis for the appeal, and must be directed to the Dean or the Chair of the Appeals Committee of the School of Graduate Studies in accordance with Routes of Appeal of Academic Regulations.
2. In the Letter of Appeal, the student must clearly and fully provide:

- name,
- current address and telephone number,
- Memorial University of Newfoundland e-mail address,
- student ID number,
- the decision being appealed,
- the grounds for the appeal, and
- the resolution being sought.

3. When providing grounds for the appeal, including health issues, bereavement and/or other acceptable cause, a student must present independent evidence to corroborate statements made in the Letter of Appeal. Preferably, this evidence will come from a professional, such as a health professional, a counsellor, or a professor. However letters from other knowledgeable parties may be acceptable.
4. A student shall include with the letter of appeal any submissions the student wishes to make in support of the appeal.
5. In cases where an appeal is made on health issues, the student must provide an original certificate from a health professional in the form of a note or a letter. Such a certificate must be sufficiently specific to allow appropriate consideration of the student's case. The certificate must also clearly state that, in the opinion of the health professional, the problem was serious enough to have interfered with the student's work. Students should refer to the policy respecting Information Required for Certificates from Health Professionals for more complete information.
6. A student claiming bereavement as grounds must provide an obituary notice or death certificate, together with evidence of a close personal relationship between the student and the deceased.
7. Privacy and Confidentiality: The committees to which appeals are made do require substantial information about the reasons for the appeal in order to make their decisions. However, the committees also recognize each student's right to privacy and their obligations, under the Access to Information and Protection of Privacy Act, to safeguard students' personal information.

### 4.6.5 Appeals to the Senate Committee on Academic Appeals

1. Appeals shall be initiated by submitting a written Notice of Appeal, c/o Office of the Registrar, containing the following: When the Notice of Appeal is from a student:

- name,
- current address and telephone number,
- Memorial University of Newfoundland e-mail address,
- student ID number,
- a copy of the decision giving rise to the appeal,
- supporting documentation,
- a description of the matter under appeal,
- the grounds of appeal, and
- the resolution being sought.

When the Notice of Appeal is from an academic unit:

- name of representative of the academic unit,
- Memorial University of Newfoundland e-mail address,
- a copy of the decision giving rise to the appeal,
- supporting documentation,
- a description of the matter under appeal,
- the grounds of appeal, and
- the resolution being sought.

2. The Notice of Appeal should include, in writing, relevant information in support of the appeal.
3. Except with the approval of the Executive Committee of Senate, notices of appeal shall be submitted no later than the last day of classes in the semester following the semester in which the decision under appeal was sent to the student.
4. In accordance with the principles of natural justice, students and academic units are entitled to make an oral presentation.
5. Appeals shall be heard either through written submissions only or through an oral hearing, as requested. No inferences will be drawn from the choice.
6. When appeal is heard by an oral presentation, a student may be accompanied by an advisor (see Appeal of Decisions, General Information, 4.). A student may participate in person, by way of teleconference, or by such other means approved in advance by the Committee; however, expenses incurred by the student are the responsibility of the student.
7. When providing the grounds for the appeal, including health issues, bereavement, and/or other acceptable cause, a student must present independent evidence to corroborate statements made in the Notice of Appeal. Preferably, this evidence will come from a professional, such as a health professional, a counsellor, or a professor. However letters from other knowledgeable parties may be acceptable.
8. A student may include with the Notice of Appeal any submissions the student wishes to make in support of the appeal.
9. In cases where an appeal is made on health issues, the student must provide an original certificate from a health professional in the form of a note or a letter. Such a certificate must be sufficiently specific to allow appropriate consideration of the student's case. The certificate must also clearly state that, in the opinion of the health professional, the problem was serious enough to have interfered with the student's work. A student should refer to the policy respecting Information Required for Certificates from Health Professionals for more complete information.
10. A student claiming bereavement as grounds must provide an obituary notice or death certificate, together with evidence of a close personal relationship between the student and the deceased.
11. Privacy and Confidentiality: The committees to which appeals are made do require substantial information about the reasons for the appeal in order to make their decisions. However, the committees also recognize each student's right to privacy and their obligations, under the Access to Information and Protection of Privacy Act, to safeguard a student's personal information.
12. Decisions of the Senate Committee on Academic Appeals are final and within the University there is no further appeal.

### 4.6.6 Information Required for Certificates from Health Professionals

1. A student who requests permission to drop courses, to withdraw from University studies, to have examinations deferred, or to obtain other waivers of University, departmental, or course regulations based on health issues is required by the University to provide, in support of the request, a certificate from a health professional in the form of a note or letter. Such certificates must be sufficiently specific to allow a proper consideration of a student's case. The University requires that all such certificates must be on letterhead, must be signed by the health professional, must confirm the specific dates on which the student visited the health professional, and should include details on the following:

- the degree to which the health issue (or treatment, in the case of medication, for example) is likely to have affected the student's ability to study, attend classes, sit examinations, or continue with research;
- the length of time over which the student's abilities were likely hampered by the condition (e.g., recurring and severe back pain over a two-month period would likely have a more adverse effect on studies than a single episode of back pain requiring bed rest for a week); and
- the fitness of the student to resume studies (it is in the student's best interest not to return to studies prematurely).

2. The University respects the privacy of students and will keep confidential all such certificates. A student should request that the health professional retain a copy of such a certificate in case the certificate needs to be verified or reissued at a later date.

### 4.7 Evaluation

Note: For interdisciplinary programs, the Head of the academic unit is the Dean or Director of the Faculty/School administering the program.

### 4.7.1 Evaluation Methods and Grading

1. Students shall write their examinations in graduate courses at a time to be determined by the Head of the academic unit on the recommendation of the Faculty member(s) concerned.
2. A written copy of the course outline, including method of evaluation in the course, shall be provided to each student in the course as early as possible, and in any case not later than two weeks after the start of the course.
3. The final evaluation submitted to the Registrar shall consist of one of the following letter grades with the appropriate numerical equivalent:

| Letter Grades | Numeric Grades | Points Per Credit Hour |
| :--- | :--- | :--- |
| A | $80-100 \%$ | 4 |
| B | $65-79 \%$ | 3 |
| C | $55-64 \%$ | 2 |
| D | $50-54 \%$ | 0 |
| F | below $50 \%$ | not applicable |
| PWD (pass with distinction) - indicates excellent performance | no numeric grade | not applicable |
| PAS (pass) - indicates performance meets expectations | no numeric grade | not applicable |
| FAL (fail) - indicates failing performance | no numeric grade | not applicable |
| DR (drop) - drop without academic prejudice | no numeric grade | 0 |
| DRF (drop fail) - drop with academic prejudice | $0 \%$ | not applicable |
| ABS (absent) - absent for acceptable cause | no numeric grade | not applicable |
| INC (incomplete) - incomplete pending final grade | no numeric grade | not applicable |
| REX (re-examination) | no numeric grade |  |

4. Supplementary examinations are not permitted.

### 4.7.2 Evaluation of Graduate Students

1. Failure to attain a final passing grade of $A$ or $B$ in a program course shall lead to termination of a student's program unless:
a. the regulations for a particular degree allow the student to repeat the course. Only one such repeat will be permitted in a student's program. Failure to obtain a grade of A or B in the repeated course shall lead to termination of the student's program.
b. the Dean of Graduate Studies approves a repeat of the course, upon the recommendation of the Supervisor and the Supervisory Committee supported by the Head of the academic unit, where 1.a above does not apply. Such recommendations must provide sufficient grounds for a repeat. Only one such repeat will be permitted in a student's program. Failure to obtain a grade of A or B in the repeated course shall lead to termination of the student's program.
Note: In exceptional circumstances, the Dean of Graduate Studies may approve a substitute course in place of the repeat upon the recommendation of the Supervisory Committee and Supervisor supported by the Head of the academic unit. Failure to obtain a grade of $A$ or $B$ in the substituted course shall lead to termination of the student's program
2. Failure in a non-program course will not normally result in termination of a student's program.
3. The Supervisor and the Supervisory Committee may recommend that a student be required to withdraw from the program, if after consultation with the student, the student's non-course work is deemed to have fallen below a satisfactory level.
4. When Departmental requirements for a degree requires an examination of a student's reading knowledge of a language(s) other than English, the examination shall be set and marked by the appropriate language Department, or by an authority as determined by the Head of the academic unit and Dean. The results of the examination will be transmitted to the student by the Dean.

### 4.7.3 Deferral of Examinations

1. Graduate students who are prevented by illness, bereavement or other acceptable cause, duly authenticated, from writing final examinations may apply, with supporting documents within one week of the original examination date to the appropriate Head of the academic unit to have their examinations deferred.
2. The Department's decision, including information on the appeals route open to the student in the case of a negative decision, must be communicated in writing to the student and to the Dean of Graduate Studies within one week of the receipt of the student's complete application.
3. In those cases where the Department accepts the extenuating circumstances the student may be permitted to write a deferred examination or, with the consent of both the Department and the student, the grade submitted may be based on term work alone.
4. An interim grade of 'ABS' will be assigned by the academic unit in the case of a student granted a deferred examination. This grade will be replaced by the final grade which must be received by the Office of the Registrar within one week following the commencement of classes in the next academic semester or session.
5. Students who are prevented by illness or bereavement or other acceptable cause, duly authenticated, from writing a deferred examination, may apply, in writing, with supporting documents within one week of the scheduled date of the deferred examination to the appropriate Department Head to have the examination postponed to a time not later than the last date for examinations in the semester following that in which the student was enrolled in the course.
6. The Department's decision, including information on the appeals route open to the student in the case of a negative decision, must be communicated to the Registrar, to the student and to the Dean of Graduate Studies within one week of the receipt of the student's complete application.

### 4.7.4 Incomplete Grades/Change of Grade

1. For good cause a grade of 'Incomplete' may, with the approval of the appropriate Department or academic unit, be submitted. This 'Incomplete' grade shall, however, be valid only for one week following the commencement of classes in the next academic session as stated in the University Diary. In the event that a mark has not been received by the Registrar within the prescribed deadline, the 'Incomplete' grade shall be changed to '0 F'.
2. Clause 1. notwithstanding, for acceptable cause an extension of time not exceeding the end of the semester following that in which the 'Incomplete' was given may be permitted by the Head of the academic unit. "Acceptable cause" in these cases must be duly authenticated and will be illness, bereavement, serious problems of a personal nature or the like.
3. Changes in grades for graduate courses must be submitted on the appropriate form, which must be signed by the course instructor and approved by the Head of the appropriate academic unit who will submit such changes to the Registrar.
Note: A grade of less than $65 \%$ cannot be changed without the approval of the Dean of Graduate Studies.

### 4.7.5 Re-Reading of Examination Papers

1. Students may apply to have a final examination paper re-read whether or not they have obtained a passing grade in that course.
2. Students who wish to have a final examination paper re-read must make written application to the Registrar enclosing the appropriate fee per paper within one month of the release by the University of the grade reports. If the mark is raised after rereading, the fee is refunded. If the mark is unchanged or lowered, the fee is forfeited.

### 4.8 Comprehensive Examinations

### 4.8.1 Master's Comprehensive Examination

1. The composition of the Comprehensive Examination Committee is specified in the Degree and Departmental regulations, and the Committee is appointed by the Dean. The Dean of Graduate Studies or delegate may exercise the right to attend. All members of the Committee including the Chairperson, but excluding the Dean of Graduate Studies or delegate, shall be voting members.
2. In this examination the student must demonstrate an advanced knowledge of the academic discipline as defined by the academic unit in which they are students. Therefore, in order to be eligible to sit the examination, all course requirements must normally be completed.
3. In cases where there are multiple parts to a comprehensive exam, including written and oral parts, a student must satisfy all parts of the examination to obtain a pass. The requirements to advance to a later part of the examination are specified in the Degree and Departmental regulations or by the appropriate academic unit.
4. Members of the Comprehensive Examination Committee shall decide the results of the comprehensive examination as indicated in a.-d. below:
a. The category of 'pass with distinction' will be awarded to students who demonstrate superior knowledge of their area(s). This category requires unanimous support of the Comprehensive Examination Committee
b. The category of 'pass' will be awarded to students who demonstrate an acceptable knowledge of their area(s) and requires a simple majority vote.
c. The category of 're-examination' selects those students with an understanding of their research area that lacks sufficient depth and scope as indicated by a simple majority of the Comprehensive Examination Committee. Only one such re-examination is possible and students in this category are not eligible for the award of 'pass with distinction'. If a re-examination is to be held, it must be conducted not less than one month and not more than six months after the first examination. The decision of the voting members of the Committee following this re-examination can only be 'pass' or 'fail' decided by simple majority. Failure will lead to immediate termination of the student's program. There is no option for further re-examination.
d. Students awarded a 'fail' are deemed, by unanimous vote of the Comprehensive Examination Committee, to be unable to demonstrate an adequate understanding of their area(s). The student's program is terminated. A simple majority vote will default to the award of 're-examination'.
5. The Chairperson of the Comprehensive Examination Committee shall report to the Head of the academic unit who shall report to the Dean. The result of the comprehensive examination(s) shall be reported to the student by the Dean.

### 4.8.2 Ph.D. and Psy.D. Comprehensive Examination

1. The student shall submit to a comprehensive examination, which may be written or oral or both as determined by the academic unit. Students shall normally take the examination no later than the end of the seventh semester in the doctoral program. Unless an extension is approved by the Dean of Graduate Studies, failure to take the examination at this time will result in the termination of the student's program.
2. This examination, whether written or oral, shall be conducted by a Committee appointed by the Dean of Graduate Studies on the recommendation of the academic unit. It shall consist of the Head of the academic unit (or delegate) who shall be the Chairperson, the student's Supervisor [or, where a Supervisor has not yet been appointed, the Graduate Officer or Chair of the Graduate Studies (or equivalent) Committee], and at least three other members, the total voting members to be an odd number. For students in the Ph.D. program, all members of the Committee including the Chairperson, but excluding the Dean of Graduate Studies or delegate, shall be voting members. For students in the Psy.D. program, the voting members of the committee shall be clinical psychologists, but will not include Chairperson, the Supervisor, or the Associate Vice-President (Academic) and Dean, Graduate Studies.
3. In this examination, the student must demonstrate a mastery of those subjects appropriate to the student's area(s), as defined by the academic unit in which the candidate is a student. Therefore, in order to be eligible to sit the examination, all course requirements must normally be completed. The area(s) upon which the student will be examined should be made known to the student no later than three months prior to the examination. The student must further be able to relate the specialization of their research to the larger context of these areas.
4. In cases where there are multiple parts to a comprehensive exam, including written and oral parts, a student must satisfy all parts of the examination to obtain a pass. The requirements to advance to a later part of the examination are specified in the Degree and Departmental regulations or by the appropriate academic unit.
5. Members of the Comprehensive Examination Committee shall decide the results of the comprehensive examination as indicated in a.-d. below:
a. The category of 'pass with distinction' will be awarded to students who demonstrate superior knowledge of their area(s). This category requires unanimous support of the Comprehensive Examination Committee.
b. The category of 'pass' will be awarded to students who demonstrate an acceptable knowledge of their area(s) and requires a simple majority vote.
c. The category of 're-examination' selects those students with an understanding of their research area(s) that lacks sufficient depth and scope as indicated by a simple majority of the Comprehensive Examination Committee. Only one such re-examination is possible and students in this category are not eligible for the award of 'pass with distinction'. If a re-examination is to be held, it must be conducted not less than one month and not more than six months after the first examination. The decision of the voting members of the Committee following this re-examination can only be 'pass' or 'fail' decided by simple majority. Failure will lead to immediate termination of the student's program. There is no option for further re-examination.
d. Students awarded a 'fail' are deemed, by unanimous vote of the Comprehensive Examination Committee, to be unable to demonstrate an adequate understanding of their research area(s). The student's program is terminated. A simple majority vote will default to the award of 're-examination'.
6. The Chairperson of the Comprehensive Examination Committee shall report to the Head of the academic unit who shall report to the Dean. The result of the comprehensive examination(s) shall be reported to the student by the Dean.

### 4.9 Supervision

### 4.9.1 Master's Candidates

Each Master's candidate shall be assigned a Supervisor by the Dean, on the recommendation of the Head of the academic unit, or the Dean of the faculty concerned.

### 4.9.2 Ph.D. and Psy.D. Candidates

1. Each candidate shall be assigned a Supervisor by the Dean, on the recommendation of the Head of the academic unit or the Dean of the faculty concerned.
2. A Supervisory Committee shall be appointed for each candidate by the Dean. The Supervisory Committee shall consist of the Supervisor (co-supervisors) who shall act as Chair, and normally at least two other members. In no circumstances may the Committee membership be fewer than two members. The membership of the Committee shall be nominated by the Head of the Department or the Dean of the faculty concerned, after consultation with the Supervisor and the candidate.
3. The Supervisory Committee shall forward its reports and recommendations to the Dean via the Head of the Department or the Dean of the faculty concerned.
4. The functions of the Supervisory Committee shall be, inter alia,
a. to decide, in consultation with candidates, the program of study, the subject of research, and the title of the thesis, and to recommend these for approval to the Dean;
b. to monitor the candidate's progress in their course programs and their research;
c. to report at least annually to the Dean on the candidates' progress and, at the same time, to advise on their continuation in the program; and to make such other reports and recommendations about the candidates to the Dean as it may deem necessary;
d. to recommend to the Dean, after consultation with the candidates, necessary changes in the program of study, the subject of research, or the title of the thesis;
e. to recommend to the Head of the academic unit or Dean of the faculty the timing of the comprehensive examination;
f. to report to the Dean that the thesis is ready for examination by completing a Supervisor Approval Form, which is to accompany the thesis upon its submission to the School of Graduate Studies; and
g. to recommend to the Dean suitable persons to act as members of the Thesis Examining Board.

### 4.9.3 Supervisory Reports

1. At least annually, the Supervisor, Supervisory Committee or the Department shall make evaluations of a student's progress in a program. Recommendations concerning continuation, amendment, or termination (see Termination of a Graduate Program) of a candidate's program, are sent to the Dean, who shall take appropriate action. Students shall be advised of the contents of this evaluation and the subsequent recommendation(s).
2. The Supervisor, Supervisory Committee, or the Department shall forward its reports and recommendations to the Dean via the Head of the academic unit or the Dean of the faculty concerned.

### 4.10 Theses and Reports

### 4.10.1 Thesis/Report Guide Supplement

The Guidelines for Theses and Reports, available at (www.mun.ca/sgs/go/guid_policies/theses.php), approved by the Academic Council of the School of Graduate Studies, provides the details for the examination process, general form and style of the thesis/report, required forms, number of copies, etc., required under this regulation.

### 4.10.2 Submission

1. Students must submit the thesis/report at least four months before the University Convocation at which the award of the Degree is expected (see University Diary in current edition of University Calendar for exact date). The School of Graduate Studies does not accept any responsibility for completing the prescribed procedure in time for the nearest Convocation unless theses or reports are submitted by the prescribed dates in any current academic year.
2. A thesis/report may not be submitted until the student has fulfilled:
a. All course requirements, if any
b. All language requirements, if any
c. The comprehensive examination, if required, and
d. All other academic requirements of the academic unit concerned.

### 4.10.3 Evaluation of Master's Theses and Reports

1. Final examiners for the thesis/report will be appointed by the Dean on the recommendation of the academic unit. There will be two
examiners for a Master's thesis. Examiners shall normally be those who have completed a graduate degree at the doctoral level, including a thesis, in the discipline or cognate area. Those serving as examiners shall not have been involved in the preparation of the thesis/report.
2. Examination of the thesis/report will result in one of the following recommendations by each examiner. The thesis/report is:
a. acceptable without modifications; or
b. acceptable, modifications are required but the thesis does not have to be re-examined*; or
c. unacceptable, the thesis/report requires modification and re-examination**; or
d. totally unacceptable, the thesis/report is failed. ${ }^{* *}$
*Modifications may include corrections of typographical errors and errors in nomenclature, improvement in phrasing, or rewriting of sections of the thesis/report. Modifications may be indicated in the text or listed separately;
${ }^{* *}$ Modifications might include (but are not limited to) the rectification of one or more of the following deficiencies: (1) misinterpretation and/or misuse of the matter covered, omission of relevant materials, unfounded conclusions, illogicality of argument, improper analysis of data and the like, (2) bad writing, (3) unacceptable physical presentation. A detailed list of problems should be included with the report;
***A detailed list of the reason(s) for failure must be included in the report.
3. If all examiners recommend that the thesis/report is totally unacceptable, then the thesis will be failed, and shall not be re-examined.
4. If an examiner recommends that the thesis/report is unacceptable, and this recommendation is accepted by the Dean, then the student may apply to the Dean for permission to resubmit the thesis for re-examination in one of the following ways:
a. to submit a modified thesis/report to the original examiners.
b. to submit a modified thesis/report to new examiners.
c. to submit the original thesis/report to an Examination Board to be appointed by the Dean.
5. If a thesis/report is re-examined, the student will not be awarded a pass unless all examiners find the thesis acceptable.
6. Under no circumstances may a thesis/report be re-examined more than once.

### 4.10.4 Evaluation of Ph.D. and Psy.D. Theses

Students for the Degree of Doctor of Philosophy and the Degree of Doctor of Psychology must submit a written dissertation deemed acceptable by the University, and demonstrate their ability to defend their work in a public oral examination. For this reason, the final decision on whether a student will be recommended for the award of the degree is made only at the conclusion of the oral examination (see The Examination Process).

1. Responsibilities of the Thesis Examining Board

The work of each student will be assessed by a Thesis Examining Board. Its first responsibility is to determine whether the thesis successfully demonstrates the student's competence to undertake independent research work. The Board must be satisfied that the work contributes significantly to knowledge in the field of study; that the contribution is of high scholarly merit; that the student is aware of the pertinent published literature; that it is written in a satisfactory style; and that it is free from typographical and other mechanical errors. The second responsibility of the Board is to conduct a final oral examination of the student and to then recommend to the Dean of Graduate Studies whether the student should be awarded the Degree.

## 2. Composition of the Thesis Examining Board

The members of the Thesis Examining Board will be appointed by the Dean on the recommendation of the Head of the academic unit who will have consulted with the supervisory committee. The Board shall consist of four members. Normally these will be the student's Supervisor (who serves on the Board in a non-voting capacity), two examiners from within the University, and one from outside the University. However, when circumstances warrant, a second external examiner may be substituted for one of the internal examiners with permission of the Dean. Examiners shall normally be those who have completed a graduate degree at the doctoral level, including a thesis, in the discipline or cognate area. Members of the supervisory committee other than the Supervisor are ineligible for appointment to the Board. Those serving as examiners shall not have been involved in the preparation of the thesis/ report.
3. The Examination Process
a. The voting members of the Board shall submit written reports on the thesis containing an assessment of the quality of the written work and a recommendation as to whether the student should be permitted to proceed to an oral examination and defence of the work. An examiner may recommend:
i. that the student be allowed to proceed to the oral defence of the thesis*; or
ii. that the stûdent not be allowed to proceed to the oral defence at this time ${ }^{* *}$; or
iii. that the student should be failed.
*Any suggested corrections or revisions should be outlined in the examiner's report. It is understood that it will be the responsibility of the Supervisory Committee to discuss the suggested changes with the student, to determine which should be incorporated in the thesis before its final submission.
${ }^{* *}$ This recommendation reflects the examiner's opinion that further research, re-analysis of data, or thorough rewriting of the
material is required. The thesis may, however, be re-submitted for examination.
b. If all examiners recommend that the student should be failed, then the thesis shall not be re-examined.
c. If an examiner recommends that the student not be allowed to proceed to the oral defence, and this recommendation is accepted by the Dean, then the student may apply to the Dean for permission to resubmit the thesis for re-examination in one of the following ways:
i. to submit a modified thesis to the original examiners.
ii. to submit a modified thesis to new examiners.
iii. to submit the original thesis to an Examination Board to be appointed by the Dean.
d. No student will be permitted to re-submit a thesis more than once. In case of a re-submitted thesis an examiner may recommend only:
i. that the student be allowed to proceed to the oral defence of the thesis; or
ii. that the student should be failed.
e. After receiving the reports from all three voting members of the Board the Dean will consider the recommendations and determine whether an oral defence of the thesis will be scheduled.
f. The Final Oral Examination and Defence of Thesis will take place at a time and place to be determined by the Dean of Graduate Studies and will be chaired by the Dean or delegate. The presence of all members of the Examining Board is normally required.
g. Following the defence, the Board will meet in camera to render a final assessment of the thesis and the student's ability to defend the their work. The Board may recommend one of the following outcomes:
i. Passed with distinction (Awarded to students who demonstrate superior knowledge of their research area(s); this category requires unanimous support of the Board. A simple majority vote will result in a recommendation of 'passed'.)
ii. Passed*
iii. Passed Subject to Conditions**
iv. Re-examination required***
v. Failed****
*This recommendation may have attached to it the requirement that the student complete certain specified revisions to the satisfaction of the Supervisory Committee, the Head of the academic unit and the Dean. These revisions must have been specified in the written appraisal submitted prior to the Oral Examination.
**This recommendation is made if there are revisions beyond those specified in the written appraisal submitted prior to the Oral Examination. This recommendation must have the conditions attached and cannot include the option of re-examination
${ }^{* * *}$ The members of the Thesis Examination Board may attach to this recommendation a list of any requirements which they feel are appropriate.
****Re-examination not permitted.
h. If the members of the Board are unanimous in their recommendation, the Chair of the Examination may accept this recommendation and inform the student of the decision. In any other case, however, the delivering of any final decision shall be deferred pending further consultation within the School of Graduate Studies.
i. No student shall be permitted more than two Oral Examinations.

### 4.10.5 Time Limit for Revision

The final version of Master's, Ph.D., and Psy.D. theses/reports found acceptable with or without corrections shall be submitted to the School of Graduate Studies within 6 months of the date on which the thesis/report and the student's examiners' reports are returned to the student's academic unit. If a corrected thesis/report is not submitted within 6 months the student is considered to have withdrawn from the program. After this time, the student must apply to be readmitted.
Master's, Ph.D., and Psy.D. theses/reports requiring re-examination shall be resubmitted to the School of Graduate Studies within 12 months of the date on which the thesis/report and the examiner's reports are returned to the student. Students requiring resubmission and re-examination of theses/reports must maintain their registration during this period. Failure to resubmit the revised thesis/report within 12 months will result in termination of the student's program.
Note: Please refer to Registration for regulations governing program registration

### 4.10.6 Prepublication

Publication of material before submission of the thesis/report for examination is permitted. The School of Graduate Studies and Supervisor should be informed of such publication.

### 4.11 Graduation Procedure

Students expecting to graduate at any particular Convocation must apply on-line on the prescribed "Application for Graduation" form to the Office of the Registrar at least by the time of the submission of the Thesis, Project Report, or Internship Report required by their program, or, if applicable, by the date of the final comprehensive examination. This form may be obtained online at the Memorial Self Service at www3.mun.ca/admit/twbkwbis.P_WWWLogin. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation.

### 4.12 Academic Misconduct

### 4.12.1 Principles

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In the course of a graduate degree program a student is expected to adhere to those principles which constitute proper academic conduct. Within the University community there is a collective responsibility to maintain a high level of scholarly integrity. Dishonesty has no place in the academic community. Academic misconduct cannot be condoned or even appear to be condoned. A student has the responsibility to ascertain those actions which could be construed as dishonest or improper. Certain flagrant violations are listed below under Academic Offences. A student is reminded that for guidance on proper scholarly behaviour the student should seek assistance from the student's instructors and supervisors. The Graduate Students' Union will provide a student with information on legal rights and the information that advice about acceptable writing standards is available through the Writing Centre.

### 4.12.2 General Information

1. These procedures shall apply to all academic offences relating to graduate studies involving, but not limited to, those students who either have been or who are enrolled at Memorial University of Newfoundland. Notification of an allegation of academic misconduct will be forwarded to the last known mailing address of the student as noted on the files at the Office of the Registrar, and to the official University email address of the student. The University reserves the right to implement action under these procedures where an allegation has been made against a student but where reasonable efforts to contact the student are unsuccessful.
2. Meetings and interviews stipulated in this regulation will be held in person, or at a distance using telephone or other interactive technologies.
3. A student who wishes to pursue research, or to attend classes, laboratories or other educational activities while an investigation under these procedures is being carried out, can normally do so with the understanding that if the allegation of academic misconduct is proven and the penalty involves either suspension or expulsion, credit will not be granted for work completed prior to a finding of guilt. This provision excludes a student charged with an offence under the Code of Student Conduct. For information regarding the Code of Student Conduct visit the website at www.mun.ca/student.
4. Although a student can continue in a program of studies, if eligible, while an investigation under these procedures is being carried out, the University does not accept liability for any consequences to the student's progress. However, the University may take these
consequences into account, as appropriate and to the extent feasible, in cases where charges are dropped or the student is not found guilty. The consequences arising from an investigation and any negative decision rendered may include retroactive effects on grades, examination results, or promotion within a program.
5. A student accused of academic misconduct may consult advisors or facilitators. Such advisors may include a representative from the Graduate Students' Union, an international student advisor, a faculty advisor, a University counselor, or a faculty member who is familiar with these Regulations and who is willing to undertake the role of advisor whether resolution is sought through Procedures for Resolution of Alleged Academic Offences at the Unit Level or Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies.

### 4.12.3 General Procedure

1. When a member of the University community (faculty, staff, student) has grounds for belief that an academic offence has been committed there should be an attempt between the parties concerned to resolve allegations of minor offences. If the alleged offence is not deemed to be minor by the accuser, or resolution proves impossible, or one party is dissatisfied with the resolution, the matter shall be reported, without delay, to the Head (or other appropriate officer) of the academic or administrative unit. If resolution is achieved and it is agreed that an academic offence has been committed, then the offence, together with the penalty applied, shall be reported to the Head of the academic or administrative unit.
2. Where resolution is not achieved, and if in the judgment of the Head of the academic or administrative unit, the alleged offence warrants resolution at the unit level, the individuals involved will be advised to attempt to resolve the matter through Procedures for Resolution of Alleged Academic Offences at the Unit Level. In the event that no resolution is possible through these procedures between the individual parties, the Head of the academic or administrative unit will institute proceedings through the School of Graduate Studies.
3. If, in the judgment of the Head of the academic or administrative unit, the alleged offence against University regulations is such as to warrant resolution through the School of Graduate Studies, the Head of the academic or administrative unit will refer the matter to the Dean, and Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies will be implemented.
4. Cases involving alleged offences on comprehensive examinations, examination of theses, allegations of impersonation, or allegations of submission of forged documents will be governed by the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies. Such cases may be initiated by the Head of the academic or administrative unit, or by the School of Graduate Studies.
5. In all cases, it is the responsibility of the academic or administrative unit to ensure that fairness and impartiality are achieved in the treatment of students.
6. Where an allegation of academic misconduct relates to research and the Tri-Agency Framework: Responsible Conduct of Research, as amended from time to time, (the Framework) applies, these procedures shall be applied in a manner consistent with the minimal requirements of the Framework.
7. Where an allegation of academic misconduct relates to research involving United States Public Health Service (USPHS) funds, these procedures shall be applied in a manner consistent with the minimal requirements of the U.S. Office of Research Integrity or other appropriate offices of the U.S. Department of Health and Human Services, including U.S. Federal Regulation 42 CFR Parts 50 and 93, as amended from time to time, and the 'Statement on Dealing with Allegations of Research Misconduct Under USPHS Research-related Activities for Foreign Institutions.'

### 4.12.4 Academic Offences

In the following section the plural shall be deemed to include the singular. Academic offences shall be deemed to include, but shall not be limited to, the following:

1. Cheating: This includes copying from another student's work or allowing another student to copy from one's own work; consulting with any unauthorized person during an examination or test, or using unauthorized aids; or knowingly recording or reporting false empirical or statistical data. The work referred to includes presentations, examinations, theses, assignments, work term reports, projects, laboratory assignments, laboratory reports, internship reports, or any other tests or evaluations which are to be used in judging the student's performance in a course or program of study; or any special tests which the University may offer; or in any presentations or publications related to academic work.
2. Impersonation: Impersonating another student or allowing oneself to be impersonated. By impersonation is meant the imitation of a student or entrance into an arrangement with another person to be impersonated for purposes of taking examinations or tests or carrying out laboratory or other assignments.
3. Plagiarism: Plagiarism is the act of presenting the ideas or works of another as one's own. This applies to all material such as theses, essays, laboratory assignments, laboratory reports, work term reports, design projects, seminar presentations, statistical data, computer programs, and research results. The properly acknowledged use of sources is an accepted and important part of scholarship. Use of such material without acknowledgment, however, is contrary to accepted norms of academic behaviour. Information regarding acceptable writing practices is available through the Writing Centre at www.mun.ca/writingcentre.
4. Theft of examination papers or other material: By theft is meant obtaining by improper means examination papers, tests, or any other such material.
5. Use and/or distribution of stolen material: The use of material which the student knows to have been improperly obtained and/or the distribution of such material is considered to be an academic offence.
6. Submitting false information: This offence includes falsifying, submitting or causing to submit false academic transcripts, forms or records, credentials, medical or other certificates, or making a false or incomplete declaration to the University.
7. Submitting work for one course, project or publication which has been or is being submitted to another course, project or publication without express permission to do so: This includes the presentation of an essay, report, or assignment to satisfy some or all of the requirements of a course when that essay, report, or assignment has been previously submitted or is concurrently being submitted for another course without the express permission of the professor(s) involved.
8. Ethical Practice: Failure to follow relevant University/Faculty/School guidelines on ethics, including but not limited to, ethical practice in research.
9. Failure to follow the Memorial University of Newfoundland Code.

### 4.12.5 Procedures for Resolution of Alleged Academic Offences at the Unit Level

### 4.12.5.1 General Information

These procedures will not be applied to cases involving alleged offences on comprehensive examinations, examination of theses, allegations of impersonation or allegations of submission of forged documents. Such alleged offences are governed by the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies.
The principle that a resolution should be mutually satisfactory to both the accuser and the accused should be upheld throughout the attempt for resolution at the unit level.

### 4.12.5.2 Explanation of Procedures

If, upon receiving a report of an alleged academic offence, the Head of the academic or administrative unit decides that an attempt should be made to resolve that matter at the unit level the following procedures shall apply:

1. Normally within one week of notification, the Head of the academic or administrative unit shall request a meeting with the accuser and the accused and at the meeting the Head of the academic or administrative unit shall state the allegation, review the Procedures for Resolution of Alleged Academic Offences at the Unit Level including the range of applicable penalties, and arrange a second meeting between the accuser and the accused only.
2. At the second meeting the accuser and accused shall endeavour to obtain a mutually satisfactory resolution of the matter.
3. The accuser and accused shall report jointly to the Head of the academic or administrative unit on the result of their second meeting.
4. If the report is of a resolution which the Head of the academic or administrative unit considers to be fair and equitable the matter shall be considered closed. If the Head of the academic or administrative unit considers the reported resolution to be unfair and/or inequitable the Head will endeavour to obtain an alternative satisfactory resolution directly with the parties.
5. Should all reasonable efforts to obtain a mutually satisfactory resolution at the unit level fail, the Head of the academic or administrative unit will refer the case to the Dean of Graduate Studies and shall inform the accuser and the accused accordingly. From this stage onward by the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies will apply.
6. At any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the student or the accuser may ask that the case be referred to the Dean, and thereafter the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies will apply.
7. Should the accused be found guilty, a brief description of the offence and the penalty(ies) applied shall be forwarded by the Head of the academic or administrative unit to the School of Graduate Studies.

### 4.12.5.3 Failure to Appear or Respond

1. If at any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the accused fails to respond to a charge, without reasonable cause, within two weeks of notification of an allegation, action may be taken on the charge in the absence of the accused.
2. If at any stage of the Procedures for Resolution of Alleged Academic Offences at the Unit Level, the accuser fails to appear at a scheduled meeting to defend an allegation, without reasonable cause, the action will be dismissed.

### 4.12.5.4 Penalties in the Case of Resolution at the Unit Level

A student who has been found guilty of an academic offence will be subject to a penalty or penalties commensurate with the offence. Some cases may warrant more than one penalty for the same offence, and previous academic misconduct will be taken into account in determining the severity of penalties. The range of penalties and their determination is:

1. Resubmission of work with appropriate reduction in grade: will allow a student to complete and submit the work a second time.
2. Reprimand: This shall be in the nature of a warning in writing by the Head of the academic or administrative unit to the student that the student's conduct has been unacceptable to the University.
3. Reduction of grade: A reduction of grade will apply to an examination, test, or assignment to which an offence is relevant, or to the entire course, and will be decided by the Head of the academic or administrative unit. Since graduate students must obtain a grade of B or PASS in required courses, a reduction of grade could lead to termination of program.

### 4.12.6 Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies

### 4.12.6.1 General Procedure

If the matter cannot be resolved following the Procedures for Resolution of Alleged Academic Offences at the Unit Level, or if, in the opinion of the Head of the academic or administrative unit, the allegation involves a major breach of University regulations, or in cases involving alleged offences on comprehensive examinations, thesis examinations, allegations of impersonation, or allegations of submission of forged or falsified documents, the following Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies shall apply.

### 4.12.6.2 Explanation of Procedures

If the Head of the academic or administrative unit (in consultation with the Dean of the student's faculty or school) is satisfied that the student has a serious case to answer, that person shall inform the student in writing of the nature of the case against the student. In addition, the Head of the academic or administrative unit shall report to the Dean of Graduate Studies who will, normally within one week, appoint as an investigator a member of the Academic Misconduct Investigations Board of the School of Graduate Studies (Investigations Board). The investigator will interview separately the accuser and accused and relevant witnesses. At these interviews, the investigator, the accuser, the accused, and relevant witnesses all have the right to be accompanied by a registered student or a member of the faculty or staff of the University.
2. Upon completion of these interviews, the investigator shall submit a written report of all findings to the Dean of Graduate Studies. The Dean of Graduate Studies shall present this report to both the accuser and accused for perusal and comment. Once in receipt of this report, the accuser and accused shall have two weeks in which to submit to the Dean of Graduate Studies any additional comments on the report that the person wishes to be considered. The investigator will be given the opportunity to correct any errors of fact should they arise from the comments of the accused and accuser prior to consideration of the allegation by the Investigations Board.
3. Upon receipt of all information from the investigator as well as comments from the accuser and accused, the Dean of Graduate Studies shall present the documents to the Chair of the Investigations Board.
4. The report shall be reviewed by a panel of three members of the Investigations Board for a decision.
5. Once a vote is taken, should the accused be found guilty, the Investigations Board shall take appropriate action in accordance with Penalties in the Case of Resolution by the School of Graduate Studies.

### 4.12.6.3 Failure to Appear or Respond

1. If at any stage of the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies, the accused fails to respond to a charge, without reasonable cause, within two weeks of notification of an allegation, action may be taken on the charge in the absence of the accused.
2. If at any stage of the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies, the accuser fails to appear at a scheduled interview to defend an allegation, without reasonable cause, the action will normally be dismissed; however, the investigation may proceed at the discretion of the Dean in consultation with the Investigations Board if the allegation or evidence warrants such action.

### 4.12.6.4 Penalties in the Case of Resolution by the School of Graduate Studies

A student who has been found guilty of an academic offence will be subject to a penalty or penalties commensurate with the offence. Enforcement of penalties resulting from Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies will be overseen by the Registrar. Some cases may warrant more than one penalty for the same offence, and previous academic misconduct will be taken into account in determining penalties. Penalties shall be imposed on the basis of the student's status at the time of the offence. The range of penalties and their determination is:

1. Reprimand: This shall be in the nature of a warning in writing by the Investigations Board to the student that the student's conduct has been unacceptable to the University.
2. Reduction of Grade: A reduction of grade will apply to an examination, test, or assignment to which an offence is relevant, or to the entire course, and will be decided by the Investigations Board. Since a passing grade for graduate students is at least a grade of B or Pass, a reduction of grade could lead to termination of program.
3. Change in Outcome of an Examination: This will apply to Comprehensive Examinations and the examination of Theses and Reports and could lead to termination of program.
4. Probation: This is a trial period the length of which will be determined by the Investigations Board. The Investigations Board will inform the student that the finding of any further academic offence during the period of probation may lead to suspension or expulsion.
5. Suspension: Suspension will apply to a course, department, faculty, school, or the University. The period of suspension will be determined by the Investigations Board and shall not exceed three consecutive semesters, and shall be part of the allowable time for a graduate program.
6. Expulsion: The recommendation for expulsion from the University will be made by the Investigations Board to the President for final decision. Prior to the President's decision, the Investigations Board will notify the accused, in writing, of the recommendation for expulsion from the University. The accused will be allowed a period of two weeks following the date of release of such notification to lodge an appeal before the President's final decision concerning expulsion from the University. Any such appeal should be made in writing or email to the Senate Committee on Academic Appeals, c/o the Office of the Registrar.
7. Rescinding of Degree: The recommendation for rescinding of a degree previously awarded by the University will be made by the Investigations Board of the School of Graduate Studies to Senate for a final decision. Prior to Senate's decision, the Investigations Board of the School of Graduate Studies will notify the accused, in writing, of the recommendation for rescinding of the degree. The accused will be allowed a period of two weeks following the date of release of such notification to lodge an appeal before the Senate's final decision concerning the rescinding of the degree. Any such appeal should be made in writing to the Senate Committee on Academic Appeals, c/o Office of the Registrar.

### 4.12.7 Transcript Entries Related to Penalties

Transcript entries shall relate to the penalty(ies) imposed as follows:

| Penalty | Transcript Entry |
| :--- | :--- |
| Reprimand | No transcript entry |
| Reduction of Grade | Entry of final grade for course |
| Change in Outcome of an Examination | Entry of final outcome for the examination |
| Probation | "On probation at the University for academic misconduct until Day, Month, Year"* |
| Suspension | "Suspended from the School of Graduate Studies for academic misconduct until Day, <br> Month, Year" |
| Expulsion | "Expelled from the University for academic misconduct" |
| Rescinding of Degree | "Degree rescinded for academic misconduct" |
| *The transcript entries for 'probation' or 'suspension' will be removed entirely upon the expiration of the penalty. |  |

### 4.12.8 Disposition of Documentation

The disposition of documents relating to allegations under these procedures shall be as follows:

1. The cases where the allegation was either found "not proven" or "unfounded" no documentation shall be retained in the student files.
2. In the case of a resolution effected through Academic Misconduct - General Procedure or Procedures for Resolution of Alleged Academic Offences at the Unit Level, a brief description of the offence and the penalty(ies) applied shall be forwarded by the Head of the academic or administrative unit to and retained by the School of Graduate Studies, separate from the student files.
3. In the case of a resolution effected through the Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies, all documentation shall be retained in the School of Graduate Studies, separate from the student files.

### 4.12.9 Right of Appeal

Appeals against decisions of the Investigations Board of the School of Graduate Studies made under Procedures for Resolution of Alleged Academic Offences by the School of Graduate Studies shall be directed to the Senate Committee on Academic Appeals, c/o Office of the Registrar.

### 4.13 Termination of a Graduate Program

Grounds for termination of a graduate program are as follows:

1. a. Failure to comply with the conditions of admission into a program, unless the conditions of admission have been changed with approval of the academic unit and the School of Graduate Studies;
b. Failure to register in any semester by the final date for adding courses (see Registration, Program Registration 1.);
c. Failure to obtain the required grades in courses as stated in the appropriate degree regulations (see Evaluation);
d. Failure in comprehensive examinations (see Comprehensive Examinations);
e. Demonstrated lack of progress in a program supported by written documentation;
f. Recommendation of the Supervisory Committee (see Supervision);
g. Failure of Thesis, Project, or Internship (see Theses and Reports);
h. Academic misconduct as outlined under General Regulations, Academic Behaviour governing the School of Graduate Studies.
2. The foregoing notwithstanding the University reserves the right to require students to discontinue their program or to deny them admission where, in the opinion of the Academic Council of the School of Graduate Studies, following appropriate professional consultation, there is a reasonable likelihood that a student's health or conduct could result in endangering the lives, health, or safety of other persons on campus or in settings related to the student's university studies
3. The foregoing notwithstanding, the School of Graduate Studies reserves the right to require students to discontinue their studies, or to deny them re-admission, where a student has been determined to have engaged in unprofessional conduct. The code of ethics of each profession will serve as the guideline as to what constitutes unprofessional conduct. However, should there not be any statements of what constitutes unprofessional conduct, the following standard will apply:
Unprofessional Conduct: That conduct which involves a breach of the duties required by professional ethics.
Notes: 1. If the University or a School or Faculty requires a student to discontinue studies under any of the above clauses, that student must be advised in writing of the nature of the case against the student and must be advised of the right to appeal before the penalty imposed takes effect.
4. Appeals against actions taken under Clause 2. should be directed to the Senate of the University. Any such appeal should be make in writing clearly stating the basis for the appeal and should be directed to the Secretary of Senate, c/o Office of the Registrar.
5. Appeals against actions taken under Clause 3. should be directed to the Appeals Committee, School of Graduate Studies.

### 4.14 Provision for Reapplication

1. A student whose program of studies has been terminated for any of the reasons outlined under Termination of a Graduate Program may apply for admission to a new program of studies leading to the same degree.
2. Notwithstanding the above, a student whose program of studies has been terminated under Termination of a Graduate Program, 1.b., shall be readmitted to the existing program only under the following conditions:
a. on the recommendation of the appropriate academic unit;
b. on the payment to the University of those registration fees which would have been payable had the student remained in continuous registration during the period since the termination of the program;
c. on the understanding that the time period during which the student was not registered shall be considered as part of the maximum time permitted for the completion of the degree.

## 5 Regulations Governing the Degree of Master of Applied Psychological Science (Co-operative)

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/psychology
This program is designed to meet the needs of both students and employers. Students will gain the skills and knowledge necessary to ask appropriate questions and conduct research in a variety of applied settings (e.g., business, government, health care, etc.). Students completing the program will be qualified for either immediate employment or further education. Students' and employers' needs will be met by a program that combines training in basic scientific methods and social psychological theory with practical experience in a variety of work settings. The training in methods and theory will be provided by the academic component of the program and the practical experience will be provided by the cooperative, work term component.

### 5.1 Qualifications for Admission

1. Admission to the program is competitive and selective. To be considered for admission to the Master of Applied Psychological Science (Co-operative) an applicant shall normally hold at least a high second class Honours degree or its equivalent, both in achievement and depth of study, from an institution recognized by the Senate.
2. Applications
a. All applicants are required to submit results from the General section of the Graduate Record Examinations.
b. Applicants are required to submit with their applications an example of their academic writing. This could include, but is not limited to, papers submitted in class, honour's thesis, etc.
c. At least one letter of reference should come from someone who is familiar with the applicant's research capability.
3. Election will be based on an applicant's overall academic performance, scores on the Graduate Record Examination and letters of reference.
4. Admission to the program shall be upon acceptance by the Dean of Graduate Studies after recommendation by the Head of the Department of Psychology which will include a proposed program of study and a proposed Supervisor.

### 5.2 Program of Study

1. Students should note that it is possible to enter Academic Term 1 only in the Fall semester commencing in September of each year.
2. Every student shall complete four Academic Terms in the Cooperative Program and shall normally be required to complete two Work Terms.
3. Academic and Work Terms normally alternate as follows:

Academic Term 1, Academic Term 2, Work Term 1
Academic Term 3, Work Term 2, Academic Term 4
4. Students shall normally complete 18 credit hours, including: Advanced Statistics in Psychology (6000), Research Design (6001), Theory and Methods in Social Psychology (6400), Program Evaluation and Applied Research (6403), Project in Applied Social Psychology (6404) and either Group Processes (6402) or Social Cognition (6401). Students will also register for the Colloquium Series in Psychology (6010) for Academic Term 1, Academic Term 2, and Academic Term 3 of their program for a maximum of three registrations.

### 5.3 Evaluation and Advancement

1. In order to continue in good standing in the program and in order to qualify for the Master's Degree, a student shall obtain a grade of A or B for program courses, and complete two Work Terms.
2. The dates for starting and finishing each Work Term are shown in the University Diary. Successful completion of the Work Term requirements is a prerequisite to graduation.
3. A competition for Work Term employment is organized by Co-operative Education. Students may also obtain their own Work Term jobs outside the competition. Such jobs must be confirmed by letter from the employer and approved by the Head of Psychology and Co-operative Education on or before the first day of the Work Term.
Work Term jobs may be outside St. John's and possibly outside Newfoundland and Labrador. Students who do not wish to accept a Work Term job arranged by Co-operative Education shall be responsible for finding an alternative acceptable to the Head of Psychology and Co-operative Education.
By entering the competition, students give permission for Co-operative Education to supply their University transcripts to potential employers.
4. The overall evaluation of the Work Term is the responsibility of Co-operative Education. The Work Term evaluation shall consist of two components:
a. On-the-job Student Performance:

Job performance shall be assessed by Co-operative Education using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought.

## b. The Work Report:

i. Work term reports shall be evaluated by a member of the faculty in the Department of Psychology. If an employer designates a report to be of a confidential nature, both employer and faculty member must agree as to the methods to protect the confidentiality of such a report before the report may be accepted for evaluation.
ii. Reports must be prepared according to American Psychological Association specifications and contain original work related to the Work Term placement. The topic must relate to the work experience and will be chosen by the student in consultation with the employer. For promotion from the Work Term, a student must obtain at least $65 \%$ in each component.
5. If a student fails to achieve the Work Term standards specified above the student will be required to withdraw from the program. Such a student may reapply to the program after lapse of two semesters, at which time the student will be required to complete a further Work Term with satisfactory performance before being admitted to any further academic term in the Faculty. A Work Term may be repeated once.
6. Students are not permitted to drop Work Terms without prior approval of the Graduate Studies Committee of the Department of Psychology, upon the recommendation of Co-operative Education. The Graduate Studies Committee will make a recommendation to the Head of Department who will make the final decision. Students who drop a Work Term without permission, or who fail to honour an agreement to work with an employer, or who conduct themselves in such a manner as to cause their discharge from the job, will normally be awarded a failed grade for the Work Term. Permission to drop a Work Term does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved Work Term in lieu of the one dropped.

### 5.4 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow. Other courses may be offered on the recommendation of the Head of the Department of Psychology.
6000 Advanced Statistics in Psychology
6001 Research Design
6010 Colloquium Series in Psychology (repeatable, non-credit)
601W Work Term 1
602W Work Term 2
6400 Theory and Methods in Social Psychology
6401 Social Cognition
6402 Group Processes
6403 Program Evaluation and Applied Research
6404 Project in Applied Psychological Science

## 6 Regulations Governing the Degree of Master of Applied Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.engr.mun.ca
The Degree of Master of Applied Science is offered in four areas: Computer Engineering, Environmental Systems Engineering and Management, Oil and Gas Engineering, and Energy Systems Engineering. For information on the research-focused Master of Engineering program, refer to the regulations governing the Degree of Master of Engineering.

### 6.1 Industrial Internship Option

The Faculty permits graduate students to undertake internships of work in industry. These internships will allow students to either (a) enhance the application of their knowledge and skills within industry, or (b) complete a research project defined by the industry. Encouragement to undertake an internship will be given only where it is clear that one of these expectations can be met.
Students registered in the M.A.Sc. program may, with the permission of their Board of Studies, the Dean of the Faculty of Engineering and Applied Science, and the Dean of Graduate Studies, select the Industrial Internship Option. Students pursuing this option must satisfy the degree regulations for an M.A.Sc. program. In addition, students in the Industrial Internship Option:

1. shall normally complete at least 18 credit hours of the courses required for their program with an average of $75 \%$ or higher prior to the internship; the remaining required courses may be taken on campus or by distance
2. shall normally spend at least two continuous semesters on campus on a full-time basis as a graduate student at this University
3. shall normally spend 4 to 8 months of their program at an internship in industry
4. shall submit monthly reports to a university supervisor appointed by their Board of Studies, and shall submit a concise progress report to their Board of Studies no later than the end of each semester while on an internship
5. shall normally not opt out once the internship starts.

### 6.2 Computer Engineering

### 6.2.1 Program of Study

1. The Faculty of Engineering and Applied Science offers a course-based program in Computer Engineering leading to the Degree of Master of Applied Science (M.A.Sc.) in Computer Engineering. The program is available only on a full-time basis.
2. The program is offered by the Faculty of Engineering and Applied Science and will be administered by a Board of Studies appointed by the Dean of Engineering and Applied Science.

### 6.2.2 Qualifications for Admission

1. Admission to the program is limited and competitive.

2. To be eligible for consideration for admission, applicants will have at least a second class engineering degree in computer engineering, computer science or electrical engineering; they will have background in many of the following areas: object-oriented programming, data structures, digital logic, computer organization, circuits and electronics, systems and signals, communications, discrete mathematics, probability and statistics and engineering design.
3. To be eligible for consideration for admission, applicants will meet the English Proficiency Requirements described under English Proficiency Requirements.

### 6.2.3 Degree Requirements

1. The degree program requires the completion of 36 credit hours, 6 of which comprise a project course.
a. Students are required to complete 9801, 9859, 9861, 9865, 9867, 9871, 9874, and 9876.
b. Three elective courses must be selected; each term the Board of Studies for the program will provide a selection of eligible courses, which may include ENGI 9821, ENGI 9822, ENGI 9868, ENGI 9869, ENGI 9872, ENGI 9875, ENGI 9877, ENGI 9878, ENGI 9879, ENGI 9880/83, ENGI 9888/91, CS 6752, CS 6756, PHYS 6012, and others designated by the Board of Studies for the program.
c. Based on their academic background, students may be required to complete additional courses at the undergraduate level.
2. Normally students will take courses as shown in Table 1. Students wishing to take courses in another sequence must request approval from the Board of Studies for the program.

|  |  |  |  |  |  |  | Table 1 M.A.Sc. in Computer Engineering Program |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparation | Core | Elective |  |  |  |  |  |  |
| Year 1 Spring | English |  |  |  |  |  |  |  |  |
| Year 1 Fall |  | 3 | 0 |  |  |  |  |  |  |
| Year 1 Winter |  | 1 |  |  |  |  |  |  |  |
| Year 2 Spring |  | 2 | 1 |  |  |  |  |  |  |
| Year 2 Fall |  | 2 | 1 |  |  |  |  |  |  |

### 6.2.4 Evaluation

Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course towards their program requirements. Any student who fails to receive $65 \%$ or more in a course must repeat the course in the case of core courses, or must either repeat or replace the course with another program course in the case of elective courses. Only two such repetitions/replacements shall be permitted in the student's program. Should a grade of less than $65 \%$ be obtained in a repeated or replacement course, the student shall be required to withdraw from the program.

### 6.2.5 Courses

980A/B Computer Engineering Project
9802/05 (excluding 9804) Special Topics in Computer Engineering
9806/09 Special Topics in Communications Engineering
9821 Digital Signal Processing
9822 Nonlinear Digital Image Processing and Analysis
9859 Computer Engineering Fundamentals
9861 High-Performance Computer Architecture
9865 Advanced Digital Systems
9867 Advanced Computing Concepts for Engineering
9868 ASIC Design
9869 Advanced Concurrent Programming

9871 Information Theory and Coding
9872 Digital Communications
9874 Software Design and Specification
9875 Embedded and Real-Time Systems Design
9876 Advanced Data Networks
9877 Computer and Communications Security
9878 Wireless and Mobile Communications
9879 Formal Specification and Development
9880-83 Special Topics in Computer Engineering
9888-91 Special Topics in Communications Engineering
Computer Science 6752 Applications of Computer Graphics
Computer Science 6756 Digital Image Processing
Physics 6012 Advanced Photonics

### 6.3 Environmental Systems Engineering and Management

### 6.3.1 Program of Study

1. The Faculty of Engineering and Applied Science offers a program in Environmental Systems Engineering and Management (ESEM) leading to the Degree of Master of Applied Science. The program is available on a full-time or part-time basis.
2. The program is offered by the Faculty of Engineering and Applied Science and will be administered by a Board of Studies appointed by the Dean of Engineering and Applied Science.

### 6.3.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a minimum second class Bachelor's Degree in engineering preferably in civil, environment, chemical, processing, or petroleum engineering, or in a related discipline from a university of recognized standing.
3. To be eligible for consideration for admission, applicants will meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

### 6.3.3 Degree Requirements

1. The Degree program requires the completion of 30 credit hours.
a. 6 credit hours comprising a project course 960A/B.
b. 15 credit hours comprised of $9601,9609,9626,9627$, and 9628 .
c. 9 credit hours (three courses) to be selected from 9603, $9605,9610-9615,9621,9622,9624,9625,9629,9630$, Environmental Science 6001, Environmental Science 6002, Environmental Science 6003, and Geography 6250.

### 6.3.4 Evaluation

Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course towards their program requirements. Any student who fails to receive $65 \%$ or more in a course, must repeat the course in the case of core courses, or must either repeat or replace the course with another program course in the case of elective courses. Any student who receives a grade of less than $65 \%$ in two courses or in a repeated course will be required to withdraw from the program.

### 6.3.5 Courses

960A Environmental Engineering Project (0 credit hours)
960B Environmental Engineering Project (6 credit hours)
9601 Environmental Pollution and Mitigation (cross-listed as Environmental Science 6004)
9603 Environmental Sampling and Pollutant Analysis (cross-listed as Environmental Science 6005)
9605 Water and Wastewater Treatment
9609 Environmental Risk Assessment (cross-listed as Environmental Science 6007)
9610-9615 Special Topics in Environmental Science and Engineering
9621 Soil Remediation Engineering
9622 Environmental Statistics
9624 Air Pollution (cross-lísted as Environmental Science 6008)
9625 Environmental Impacts of Offshore Oil and Gas Operations
9626 Environmental Management System
9627 Environmental Systems Engineering
9628 Environmental Laboratory
9629 Environmental Policy and Regulations
9630 Pollution Prevention
Environmental Science 6001 Earth and Ocean Systems
Environmental Science 6002 Environmental Chemistry and Toxicology
Environmental Science 6003 Applied Ecology
Geography 6250 Conservation of Natural Resources

### 6.4 Oil and Gas Engineering

### 6.4.1 Program of Study

1. The Faculty of Engineering and Applied Science offers a program in Oil and Gas Engineering leading to the degree of Master of Applied Science in Oil and Gas Engineering (M.A.Sc.(OGE)). The program is available on a full-time basis.
2. The program is offered by the Faculty of Engineering and Applied Science and will be administered by a Board of Studies appointed by the Dean of Engineering and Applied Science.

### 6.4.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a minimum second class Bachelor's Degree in engineering preferably in mechanical, chemical/process, civil, environmental, mining/mineral, or petroleum engineering, or in a related discipline from a university of recognized standing.
3. To be eligible for consideration for admission applicants will meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

### 6.4.3 Degree Requirements

1. The degree program requires the completion of 30 credit hours.
a. 6 credit hours comprising a project course Engineering 910A/910B.
b. 15 credit hours by completing Engineering 9110, 9113, 9114, 9118 and 9121.
c. 9 credit hours (three courses) to be selected from Engineering 9002, 9015, 9111, 9112, 9116, 9117, 9119, 9120, 9420, 9609, 9624, $9625,9901,9902,9989$. Engineering 9117 is a recommended elective course for students without adequate background in petroleum engineering.

### 6.4.4 Evaluation

Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course towards their program requirements. Any student who fails to receive $65 \%$ or more in a course must repeat the course in the case of core courses, or must either repeat or replace the course with another program course in the case of elective courses. Any student who receives a grade of less than $65 \%$ in two courses or in a repeated course will be required to withdraw from the program.

### 6.4.5 Courses

9002 Ocean Engineering Structures
9015 Ocean Engineering Hydrodynamics
910A OGE Project Course (0 credit hours)
910B OGE Project Course (6 credit hours)
9110 Advanced Petroleum Production Engineering
9111 Well Testing
9112 Multiphase Flow
9113 Phase Behaviour of Petroleum Reservoir Fluids
9114 Advanced Reservoir Engineering
9116 Reliability Engineering
9117 Offshore Petroleum Geology and Technology
9118 Advanced Drilling Engineering
9119 Compact Process Equipment Design
9120 Advanced Natural Gas Engineering
9121 Advanced Safety, Risk and Reliability Modeling
9420 Engineering Analysis
9609 Environmental Risk Assessment
9624 Air Pollution
9625 Environmental Impacts of Offshore Oil and Gas Operations
9901 Fundamentals of Fluid Dynamics
9902 Advanced Transport Phenomena
9989 Special Topics Course - Corrosion Principles, Prevention and Control

### 6.5 Energy Systems Engineering

### 6.5.1 Program of Study

The Faculty of Engineering and Applied Science offers a program in Energy Systems Engineering leading to the degree of Master of Applied Science in Energy Systems Engineering (MESE). The program is available on a full-time basis. There are two options: Option 1 focuses on energy generation and utilization and Option 2 focuses heavily on electrical aspects of energy engineering. Option 1 is designed for students with an engineering degree in mechanical, chemical, industrial or in a related discipline. Option 2 is designed for students with a degree in electrical engineering or in a related discipline.

### 6.5.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a minimum second class Bachelor's Degree in engineering in mechanical, electrical, chemical, industrial, or in a related discipline from a university of recognized standing.
3. To be eligible for consideration for admission, applicants will meet the English Proficiency Requirements described under General Regulations of the School of Graduate Studies.

### 6.5.3 Degree Requirements

1. The degree program requires the completion of 30 credit hours for both Options 1 and 2.
a. 6 credit hours comprising a project course ENGI 990A/990B.
b. 15 credit hours (five courses) - core courses

## Option 1:

9 credit hours by completing:
ENGI 9853 Energy Economics and Policy
ENGI 9854 Fundamentals of Energy Systems
ENGI 9855 Energy and the Environment
6 credit hours by completing

ENGI 9856 Electrical Power Systems
ENGI 9909 Advanced Thermodynamics

## Option 2:

9 credit hours by completing:
ENGI 9853 Energy Economics and Policy
ENGI 9854 Fundamentals of Energy Systems
ENGI 9855 Energy and the Environment
6 credit hours by completing
ENGI 9857 Instrumentation and Control of Energy Systems
ENGI 9858 Advanced Power Systems
c. 9 credit hours (three courses) - elective courses

## Option 1:

ENGI 9841 Thermal Power Plants
ENGI 9845 Energy Storage
ENGI 9843 Solar Engineering
ENGI 9420 Engineering Analysis
ENGI 9985Advanced Heat Transfer
ENGI 9901 Fundamentals of Fluid Dynamics
ENGI 9977 Computational Fluid Dynamics

## Option 2:

ENGI 9845 Energy Storage
ENGI 9841 Thermal Power Plants
ENGI 9843 Solar Engineering
ENGI 9420 Engineering Analysis
ENGI 9896 Renewable Energy Systems
ENGI 9862 Power System Protection
ENGI 9863 Grid Integration of Energy Systems

### 6.5.4 Evaluation

Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course towards their program requirements. Any student who fails to receive $65 \%$ or more in a course, must repeat the course in the case of core courses, or must either repeat or replace the course with another program course in the case of elective courses. Any student who receives a grade of less than $65 \%$ in two courses or in a repeated course will be required to withdraw from the program.

### 6.5.5 Courses

ENGI 9420 Engineering Analysis
ENGI 9841 Thermal Power Plants
ENGI 9843 Solar Engineering
ENGI 9845 Energy Storage
ENGI 9853 Energy Economics and Policy
ENGI 9854 Fundamentals of Energy Systems
ENGI 9855 Energy and the Environment
ENGI 9856 Electrical Power Systems
ENGI 9857 Instrumentation and Control of Energy Systems
ENGI 9858 Advanced Power Systems
ENGI 9862 Power System Protection
ENGI 9863 Grid Integration of Energy Systems
ENGI 9896 Renewable Energy Systems
ENGI 990A MESE Project Course
ENGI 990B Continuation of MESE Project Course
ENGI 9901 Fundamentals of Fluid Dynamics
ENGI 9909 Advanced Thermodynamics
ENGI 9977 Computational Fluid Dynamics
ENGI 9985 Advanced Heat Transfer

### 6.6 Safety and Risk Engineering

### 6.6.1 Program of Study

1. The Faculty of Engineering and Applied Science offers a program in Safety and Risk Engineering leading to the degree of Master of Applied Science in Safety and Risk Engineering (M.A.Sc.(SRE)). The program is available on a full-time or part-time basis.
2. The program is offered by the Faculty of Engineering and Applied Science and will be administered by a Board of Studies appointed - by the Dean of Engineering and Applied Science.

### 6.6.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a minimum second class Bachelor's Degree in engineering preferably in mechanical, chemical/process, civil, safety and inspection, environmental, mining/mineral, petroleum engineering, or computational science or in a related discipline from a university of recognized standing.
3. To be eligible for consideration for admission applicants will meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

### 6.6.3 Degree Requirements

The degree program requires the completion of 30 credit hours as follows:

1. 6 credit hours comprising two project courses Engineering 915A/915B.
2. 15 credit hours by completing Engineering 9115, 9116, 9121, 9330 and 9411.
3. 9 credit hours (three courses) to be selected from Engineering 7623, 9340, 9516, 9609, 9622, 9625, 9977, and 9989.

### 6.6.4 Evaluation

Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course towards their program requirements. Any student who fails to receive 65\% or more in a course must repeat the course in the case of core courses, or must either repeat or replace the course with another program course in the case of elective courses. Any student who receives a grade of less than $65 \%$ in two courses or in a repeated course will be required to withdraw from the program.

### 6.6.5 Courses

7623 Process Simulation
915A SRE Project Course (0 credit hours)
915B SRE Project Course (6 credit hours)
9115 Safety and Risk Engineering
9116 Reliability Engineering
9121 Advanced Safety and Risk Engineering
9330 Abnormal Situation Management, Fault Detection and Analysis
9340 Material Degradation and Asset Management
9411 Probabilistic Methods in Engineering
9516 Similitude, Modelling and Experimental Data Analysis
9609 Environmental Risk Assessment
9622 Environmental Statistics
9925 Environmental impacts of offshore oil and gas operations
9899 Special Topics Course - Corrosion Principles, Prevention and Control
9977 Computer and Communication Security

## 7 Regulations Governing the Degree of Master of Applied Statistics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/math
The Degree of Master of Applied Statistics (M.A.S.) is a highly structured program incorporating 18 credit hours in program courses and a practicum in applied statistics. The Degree is offered in the Department of Mathematics and Statistics by full-time or part-time study.

### 7.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission to the Master of Applied Statistics program, an applicant shall normally hold at least a high second class Honours Degree or its equivalent, in statistics or cognate discipline from an institution recognized by the Senate.
2. In addition, an applicant shall normally have completed undergraduate courses in statistics which cover the material of Statistics $3411,3520,3521,3585,4530$. If necessary, an applicant may be required to demonstrate a satisfactory knowledge of the above courses in an examination administered by the Department of Mathematics and Statistics.
3. Admission to the program shall be upon acceptance by the Dean of Graduate Studies after recommendation by the Head of the Department of Mathematics and Statistics along with a proposed program of study and a proposed Supervisor.

### 7.2 Program of Study

The minimum requirements for the Degree of Master of Applied Statistics are completion of the following:

1. The graduate courses STAT 6509, STAT 6519 and STAT 6545 , plus three additional 3 credit hour courses from the list of Applied Statistics Elective Courses.
2. STAT 6590, which consists of a minimum of 20 hours of training in statistical consultancy to be arranged through the Department's statistics consulting centre
3. STAT 698A/B and a final applied statistics project report. The report must demonstrate a satisfactory general mastery of applied statistical knowledge.

### 7.3 Evaluation

1. In order to continue in graduate studies and in order to qualify for a Master's Degree, a student shall obtain an A or B for all regular program courses. In order to quality for a graduation the student shall pass STAT 6590 and STAT 698A/B and complete successfully the final project requirement.
2. STAT 698A/B progress after each semester will be evaluated by the student's supervisor while the final applied statistics project report will be evaluated by a faculty member other than the supervisor appointed by the Head of the Department.

### 7.4 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.

### 7.4.1 Applied Statistics Required Courses

6509 Statistical Inference
6519 Regression Models
6545 Computational Statistics
6590 Statistical Consultancy (1 credit hour)
698A/B Applied Statistics Project (2 credit hours)

### 7.4.2 Applied Statistics Elective Courses

6505 Survival Analysis
6530 Longitudinal Data Analysis
6559 Statistical Exploration of Data
6561 Categorical Data Analysis
6563 Sampling Theory
6564 Experimental Designs
6571 Financial and Environmental Time Series
6573 Statistical Genetics

## 8 Regulations Governing the Degree of Master of Arts

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss
The Degree of Master of Arts (M.A.) is offered in Anthropology, Archaeology, Classics, Economics, English, Environmental Policy, Ethnomusicology, Folklore, French Studies, Geography, German Language and Literature, History, Linguistics, Philosophy, Political Science, Religious Studies, and Sociology.
Applicants are advised to consult, in addition to the regulations governing the Degree of Master of Arts, both the General Regulations and the particular regulations of the appropriate Departments.

### 8.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission an applicant shall hold a Bachelor's Degree or its equivalent from an institution recognized by the Senate and shall have a knowledge of the proposed field of specialization satisfactory to the Department concerned (or Departments, when interdisciplinary study is intended) and to the Dean.
2. Preference will normally be given to applicants who hold an appropriate Honours Degree, either from Memorial University of Newfoundland, or from another university whose Honours Degree is of comparable standing. Any other applicant who holds a Bachelor's Degree or its equivalent will be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least grade B in courses in the proposed field of specialization;
b. the applicant's overall undergraduate record after the first year shows an average of at least grade B in all courses taken; and
c. the Department concerned satisfies the Dean that the applicant's work exhibits evidence of academic excellence.

Only in exceptional circumstances, and only on the recommendation of the Department concerned, will the Dean consider applicants who do not meet the requirements in $a$. and $b$. Such applicants, however, must meet the requirements in $c$.
3. An applicant may be required to demonstrate a satisfactory knowledge of the proposed field of study in an examination administered by the Department or Departments.
4. In most cases instruction is in English, and examinations and theses are to be written in English. (Language Departments, however, give instruction in the pertinent language and often require examinations and theses to be written in the language. In addition, other Departments may permit or even require examinations and/or theses to be written in a language other than English.)

### 8.2 Program of Study and Research

1. The program of study for the Master of Arts Degree shall consist of the successful completion of a program of courses and, in accordance with Departmental regulations, either of a thesis embodying systematic research or of a Comprehensive Examination.
For programs requiring 24 credit hours or more, the academic unit may choose not to require a thesis or comprehensive examination.
2. Every student shall read at least 12 credit hours in program courses at the graduate level in one subject or in closely related subjects. Departmental regulations may require more courses than the minimum and this higher number is listed where applicable in the regulations of the Department.
3. Students may, with the approval of the Dean, augment their program with a limited number of other courses of their choice. Passing grades are not required in these non-program courses in order to continue in graduate studies or obtain a Master's Degree.
However, the final grades in these courses will be recorded on the student's transcripts. The grading system in non-program courses shall be that appropriate to the particular course.
4. Students submitting a thesis on an approved topic shall conduct systematic research under the direction of a Supervisor recommended by the appropriate Department or Departments and approved by the Dean. The student may be required to take an oral examination.
5. Changes in either the program of courses or the topic of the thesis require the approval of the Dean.
6. On the recommendation of the Head of the Department, the Dean may waive, in part, the course requirements for a Master's Degree.
7. Application for transfer from the Master of Arts to the Master of Philosophy is to be made to the Dean before the end of the second semester in the case of full-time students, and in the case of part-time students before 18 graduate credit hours have been completed.
8. The Dean may approve an application to transfer from the M.A. to the M.Phil. only when a new integrated program, acceptable to the Dean, is submitted.

### 8.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree, a student shall obtain an A or B grade in each regulation course. Some students may be required to read a specified number of additional graduate or undergraduate courses for which a passing grade must be achieved.
2. Students registered for credit shall write their examinations in their graduate courses at a time to be determined by the Dean on the recommendation of the Department.
3. Students registered in undergraduate courses shall satisfy examination requirements in these courses.
4. When, on a basis of consultation with the student, the instructors in graduate courses, and the thesis Supervisor, the Head of a

Department has determined that the student's work has fallen below a satisfactory level, the Head may recommend to the Dean that the student be required to withdraw from the program.

### 8.4 Thesis or Report

See General Regulation, Theses and Reports.

### 8.5 Anthropology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/anthro
The Degree of Master of Arts (M.A.) is offered in Anthropology by either full-time or part-time study.

1. Students will specialize in social and cultural anthropology.
2. When students are accepted into the program, they will be assigned one or more Supervisors. Students' programs shall be the responsibility of their Supervisor(s), the graduate co-ordinator(s), and the Head of the Department.
3. If students' records suggest a deficiency in some areas(s), the Department reserves the right to require that they complete additional undergraduate courses before beginning program courses.
4. Students may choose between a thesis and a non-thesis option.

### 8.5.1 M.A. With Thesis

1. Normally, the M.A. program should take two academic years to complete, of which the first year will be spent in completing course work, writing and orally defending a thesis proposal before members of the faculty, and beginning to carry out research. The second academic year will be spent in completing research, presenting an oral research report to the Department, and completing a thesis.
2. Students for the Degree of a Master of Arts with thesis in Anthropology will be required to complete not fewer than 12 credit hours, nor more than 18 credit hours of courses at the graduate level. Six of these credit hours will normally be from 6300 and 6412 , while the remainder of credit hours are to be selected from the graduate courses offered by the Department.
3. Most Department graduate courses are taught in either a seminar or tutorial framework; all courses require intensive reading, regular oral communication of ideas to faculty and other students, and preparation of written research papers and other assignments.
4. Normally, during the second semester of the first year of study in the program, a written thesis proposal which has been approved by the student's Supervisor(s) will be circulated to all members of the Department. The written thesis proposal should be made available to faculty members at least two weeks prior to the scheduled date of a student's oral presentation and defence of the proposal.
5. Shortly following the completion of their research, students will be required to present an oral research report on their findings to the Department.
6. A final draft of the thesis will be evaluated in accordance with the requirements of the School of Graduate Studies.

### 8.5.2 M.A. Without Thesis

Normally, the M.A. program without thesis should take one academic year to complete. Students who choose to do the M.A. without thesis must normally complete 24 credit hours in graduate program courses; 15 of which will normally be from ANTH 6300, ANTH 6412, and ANTH 6440. Nine additional credit hours are to be selected from the graduate courses offered by the Department.
Note: ANTH 6440 will be worth 9 credit hours. This course will normally be based on secondary literature and will be supervised by a faculty member.

### 8.5.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow,
6010 Environmental Anthropology *
6071 Health and IIIness: Cultural Contexts and Constructions
6072 Marx and Social Inquiry
6081 Anthropology of Gender
6089 Anthropology of Underclass Life
6100 Social Organization
6110 Culture and Personality
6140 The Community
6210 Language and Culture
6240 Atlantic Regional Studies
6260 Anthropology of Development
6280 Newfoundland Ethnography
6281 Lábrador Ethnography
6282 Ethnography of a Single Region
6300 Fieldwork and Interpretation of Culture
6400 Current Themes in Cultural Anthropology
6410 History of Anthropology
6412 Anthropological Theory
6413 Applied Anthropology
6430 Audiovisual Anthropology
6440 Master's Research Paper ( 9 credit hours)
6580 Selected Themes in Political Anthropology
6580-6599 Special Areas in Anthropology (excluding 6580, 6583)
6583 Economics and Societies
6600 Contemporary Debates in Anthropology
6890 Graduate Seminar

### 8.6 Archaeology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/archaeology

### 8.6.1 Program of Study

The Degree of Master of Arts is offered in Archaeology by either full-time or part-time study.

1. Students may specialize in either archaeology or bioarchaeology.
2. The choice of specialty will govern the selection of Supervisor(s), courses, and thesis or research paper topics. When students are accepted into the program, they will be assigned one or more Supervisors. Students' programs shall be the responsibility of their Supervisor(s), the graduate co-ordinator, and the Head of the Department.
3. If students' records suggest a deficiency in some areas(s), the Department reserves the right to require that they complete additional undergraduate courses before beginning program courses.
4. Normally, the M.A. program should take six academic semesters to complete, of which the first three semesters will be spent in completing course work, writing and orally defending a thesis proposal before members of the faculty, and beginning to carry out research. The following semesters will be spent in completing research, presenting an oral research report to the Department, and completing a thesis.
5. Students for the Degree of a Master of Arts in Archaeology will be required to complete not fewer than 12 credit hours, nor more than 18 credit hours of courses at the graduate level.
6. Most Department graduate courses are taught in either a seminar or tutorial framework; all courses require intensive reading, regular oral communication of ideas to faculty and other students, and preparation of written research papers and other assignments.
7. Normally, during the second semester of the first year of study in the program, a written thesis proposal which has been approved by the student's Supervisor(s) will be circulated to all members of the Department. The written thesis proposal should be made available to faculty members at least two weeks prior to the scheduled date of a student's oral presentation and defence of the proposal.
8. Shortly following the completion of their research, students will be required to present an oral research report on their findings to the Department.
9. A final draft of the thesis will be evaluated in accordance with the requirements of the School of Graduate Studies.

### 8.6.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6020 Bioarchaeology
6040 Human Osteology
6095 Advanced Studies in Ethnohistory (same as History 6095)
6151 Palaeoethnobotany
6181 Palaeoeskimo Cultures of the Eastern Arctic
6182 Advances in Material Culture Analysis
6187 Readings in Maritime Provinces Prehistory
6189 Palaeopathology
6191 Approaches to Early Modern Material Culture
6192 Conservation Method and Theory
6290 Newfoundland and Labrador Prehistory
6310 Economic Analyses in Archaeology
6320 Ethnoarchaeology
6330 Archaeological Field Conservation
6409 History of Archaeology
6411 Theory and Method in the Study of Archaeology and Prehistory
6500 Special Topics in Historical Archaeology (prerequisite 6191)
6680-6699 (excluding 6687) Special Topics in Archaeology and Prehistory
6687 Applied Archaeological Sciences
6700 Interpretative Methods in Archaeology
6701 Interpretative Methods in Historical Archaeology
6890 Graduate Seminar

### 8.7 Classics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/classics
The degree of Master of Arts is offered in Classics. The program is designed so that it may be completed in two academic years of fulltime study.

### 8.7.1 Qualifications for Admission

Admission requirements are set forth in the Regulations Governing the Degree of Master of Arts, Qualifications for Admission. In addition to these requirements, an applicant should have completed at least 30 undergraduate credit hours in Greek and Latin language courses including a minimum of 12 credit hours in each language and at least 6 credit hours from senior level courses.

### 8.7.2 Program of Study

1. A student will complete a minimum of 24 credit hours in Classics courses at the 6000 level including Classics 699A and 699B; 6 of these 24 credit hours must be in Greek and/or Latin courses. Further courses beyond the minimum number may be required, depending on the background of the student.
2. A student is required to demonstrate competence in a modern European language, normally French, German, or Italian, as early as possible in their program of study, but no later than the end of the first semester of the second year. (See General Regulations,

# Evaluation, Evaluation of Graduate Students.) 

### 8.7.3 Courses

6001 Seminar in Greek History and Society
6002 Seminar in Greek Literature and Culture
6003 Seminar in Roman History and Society
6004 Seminar in Roman Literature and Culture
6200 Latin Literature: Oratory
6210 Latin Literature: Epic, drama, didactic
6220 Latin Literature: Lyric, satire, elegy, epigram
6230 Roman Historians
6250-6260 Special Topics in Latin Readings
6300 Greek Literature: Oratory
6310 Greek Literature: Epic, drama, didactic
6320 Greek Literature: Lyric, iambic, elegy, epigram
6330 Greek Historians
6340 Ancient Philosophical Authors
6350-6360 Special Topics in Greek Readings
699A Master's Research Paper (0 credit hours)
699B Master's Research Paper (6 credit hours)

### 8.8 Economics

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss www.mun.ca/econ
The Degree of Master of Arts is offered in Economics. The focus of the program is applied economics. The non-thesis option is designed so that suitably qualified full-time students can complete it in one year. The thesis option normally takes more than one year.

### 8.8.1 Qualifications for Admission

To be considered for admission, an applicant must normally have completed an undergraduate Degree in Economics at a Canadian university with at least second-class Honours standing, or its equivalent. Satisfaction of this criterion does not guarantee admission and, if admitted, students may be required to complete specified undergraduate courses as deemed necessary by the Department.

### 8.8.2 Programs of Study

## 1. Non-Thesis Option

a. The program of study requires, in addition to any specified undergraduate courses, completion of 26 credit hours in graduate Economics courses, including a master's essay course. The maximum time normally permitted for students to satisfy these requirements is three years.
b. The 26 credit hours in graduate courses consist of the following:
i. 11 credit hours in core courses, which shall normally be completed in the first term of the program: Economics 6000, 6001, 6002, and 6009;
ii. 12 credit hours in other courses selected from those offered by the Department;
iii. Masters Essay course: Economics 6999 . Normally, all other required graduate courses must be completed before the essay.
c. The master's essay, Economics 6999, must be in the area relating to the courses taken by the student. Students will be assigned a Supervisor, who will approve the topic; the essay will be graded by the Supervisor and one other member of the Department. The essay must be completed during the semester in which the student is registered in Economics 6999. During that time, students may be'required to give a Departmental seminar on their essays.

## 2. Thesis Option

a. The thesis option consists of 20 credit hours and a thesis. The thesis will consist of a comprehensive study in the area of the student's field courses. The thesis must embody systematic research and demonstrate a mastery of economic principles and their application. Thesis work will be completed under a Supervisor from the Department.
b. The thesis must normally be completed within the two years following completion of 20 required credit hours, which must include Economics 6000, 6001, 6002, and 6009.
c. The thesis will hormally be evaluated internally and in accordance with the requirements of the School of Graduate Studies.

### 8.8.3 Courses

The following courses will be offered to meet the requirements of students, as far as resources of the Department will allow.

### 8.8.3.1 Core Courses

6000 Advanced Micro-economic Theory
6001 Advanced Macro-economic Theory
6002 Econometrics
6009 Graduate Seminar (2 credit hours)
Economics 6000, 6001, 6002 and 6009 are prerequisites for all graduate courses that follow, unless waived in writing by Head of the Department.

### 8.8.3.2 Elective Courses

6010 Taxation
6011 Expenditure
6012 Cost-benefit Analysis
6013 Fiscal Federalism
6014 Topics in Public Sector Economics
6020 Economics of Nonrenewable Natural Resources

6021 Economics of Renewable Natural Resources
6022 Environmental Economics
6023 Advanced Fisheries Economics
6024 Topics in Resource Economics
6025 Labour Economics
6040 Industrial Economics
6050-55 Special Topics in Economics
6100 Microeconomic Theory and Applications
6140 Health Economics in the Canadian Context
6150 Advanced Applied Regression Analysis
6151 Applied Microeconometrics
6190 Advanced Topics in Mineral and Petroleum Economics

### 8.8.3.3 Master's Essay Course

6999 Master's Essay

### 8.9 English

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/english
The degrees of Master of Arts and Doctor of Philosophy are offered in English.
Students for the M.A. in English may complete the program as either part-time or full-time students. Students for the Ph.D. in English must be in attendance as full-time students for at least three semesters of the program.

### 8.9.1 Admission

1. Admission to the M.A. in English is limited and competitive. Applicants should have an Honours B.A. in English (or the equivalent, 60 credit hours in English with an appropriate range of courses) and a strong academic record.
2. Strong students who have come close to achieving Honours equivalency may be admitted on the condition that they complete such undergraduate courses as the Department may deem necessary, in addition to the required graduate courses.
3. Students who have not completed English 4900 or an equivalent course will be required to complete English 5900 which will not count as one of the required courses for the M.A. The course will be graded 'pass' or 'fail'. As in other graduate courses a grade of 65 or above is considered a pass.

### 8.9.2 Program of Study

## 1. Thesis Option

a. Students completing the M.A. with thesis will complete a minimum of 15 credit hours in graduate courses, which will normally include English 7003 and a thesis. The thesis may be a creative work.
b. Students must submit a thesis proposal which includes a statement of topic, a working title, a plan of research, and a preliminary bibliography. The proposal should be approved by the Supervisor or Supervisors and submitted to the Departmental Graduate Studies Committee for its approval by the end of the student's third semester. The Departmental Graduate Studies Committee shall return the thesis proposal to the student no later than one month after receiving it.
c. Full-time students who choose the thesis option will usually complete their degree in two years.
2. Non-Thesis Option
a. Students completing the M.A. without thesis will complete a minimum of 24 credit hours in graduate courses, which will normally include English 7003.
b. Full-time students, who choose the non-thesis option will usually complete their degree in one year.

### 8.9.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
Notes: 1. Since it is impossible to list in detail the many topics that may from time to time be offered, the titles below refer only to the major periods and general subject areas in which specific courses may be available. The content and approach in specific courses will vary according to the research interests of students and faculty involved in the course. Students should consult the Department's annual Graduate Student Guide (or the Graduate Co-ordinator) for detailed descriptions of specific course offerings. Normally, no fewer than ten graduate courses are offered in any given academic year.
2. English 5900 cannot be counted as one of the required graduate courses in any program.
3. All students will normally take English 7003 - Trends in Contemporary Literary Theory, usually in their first semester.
4. Students who took graduate courses in English at Memorial University of Newfoundland before 1997 should consult with the Department before selecting further courses.
602F Foundation English for Graduate Students
6999 Master's Essay (fornon-thesis students)
7003 Trends in Contemporary Critical Theory
7099 Masters Internship
7100-7149 Author Studies
7150-7199 Book Histories
7200-7249 Creative Writings
7250-7299 Critical Theories
7300-7349 Cultural Studies
7350-7399 Genre Studies
7400-7449 Global Literatures
7450-7499 Indigenous Voices
7500-7549 Literary Movements
7550-7599 National Literatures
7600-7649 Period Studies
7650-7699 Regional Literatures

### 8.10 Environmental Policy

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/sgs
The M.A. in Environmental Policy is a rigorous, interdisciplinary study of environmental policy in terms of its theory, application, methodology, and approaches with reference to central contemporary debates. It is also an applied program that equips students with practical skills in the field making links to the labour market through a required internship program.
The M.A. in Environmental Policy is offered by full-time study or part-time study and by completion of either a thesis or research paper. The Thesis Option involves completion of 15 credit hours of course work, an internship, and a thesis, and is normally completed in two academic years of full-time study and in three academic years of part-time study. The Research Paper Option involves completion of 18 credit hours of course work, an internship, and a research paper, and is normally completed in one academic year of full-time study and up to three academic years of part-time study.
The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 8.10.1 Administration

1. The program shall be administered by a Graduate Officer, who reports to the Dean of Graduate Studies. The Graduate Officer shall be appointed by the Dean of Graduate Studies on the recommendation of the Head of Social Science, Grenfell Campus and the Vice-President, Grenfell Campus. In making this recommendation, the Head of Social Science, Grenfell Campus and the VicePresident, Grenfell Campus may consult with the environmental policy community both within and outside the University.
2. An Executive Committee consisting of the Graduate Officer and the Head of Social Science, Grenfell Campus and the VicePresident, Grenfell Campus will be established to review administrative, resource, and strategic planning issues related to the program. This committee shall be chaired by the Dean of Graduate Studies.
3. The Graduate Officer shall consult with the Graduate Committee in Environmental Policy (GCEP) for the purposes of administering the academic elements of the program. The GCEP shall normally consist of seven members appointed by the Dean of Graduate Studies on the recommendation of the Graduate Officer. The GCEP will include the Graduate Officer, who shall chair the committee, approximately four faculty members from the School of Arts and Social Science, Grenfell Campus who teach core courses, the Head of Social Science, Grenfell Campus and one student representative, Grenfell Campus.
4. An Advisory Board in Environmental Policy (ABEP) shall be established for the purposes of consulting with and obtaining feedback from the environmental policy community. The ABEP will consist of a broad cross-section of members from the environmental policy community both within and outside the University who shall be appointed by the Dean of Graduate Studies on the recommendation of the Graduate Officer.

### 8.10.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall have an undergraduate degree, with a minimum $B$ standing, from an institution recognized by Senate.
3. In exceptional cases, applicants who have not completed an undergraduate degree may be considered for admission. Preference will be given to those who have a minimum of 10 years of full-time professional experience, including demonstrated success in environmental policy, and who have successfully completed substantial university course work including several courses at an advanced undergraduate level from an institution recognized by Senate. Applicants without an undergraduate degree must have completed one or more undergraduate courses in public policy, public administration or political science and one or more undergraduate courses in geography, biology or chemistry from an institution recognized by Senate, with a minimum B standing in each course. Applicants may also be required to successfully complete the Graduate Management Admission Test (GMAT) or the Graduate Record Examination(GRE) with an acceptable score and/or additional undergraduate courses before being considered for admission.
4. To be eligible for consideration for admission, applicants shall meet the English Proficiency Requirements described under General Regulation-Qualifications for Admission, English Proficiency Requirements.
5. Applicants will be assessed for admission to the M.A. in Environmental Policy based on their interests, their potential to produce meaningful research in the field of environmental policy, and the availability of supervisors in the area of the applicant's interest.
6. Interdisciplinary study in the program is encouraged by the University. Applicants with an interdisciplinary background or whose background combines two or more fields of study (e.g., political science, public policy, environmental studies, geography, resource management, environmental science, public administration) would be an excellent fit for this program.

### 8.10.3 Deadlines for Applications

1. Applicants seeking full-time enrollment will normally only be admitted to the program in the Fall (September) semester.
2. Applications must be postmarked no later than February 15 for applicants wishing to enter full-time or part-time studies in the Fall (September) semester.
3. Applications must be postmarked no later than August 15 for applicants wishing to enter part-time studies in the Winter (January) semester.
4. Individuals submitting applications later than the above dates are not assured of consideration for admission to the program in the semester desired; their applications will be processed only if time and resources permit.

### 8.10.4 Procedure for Admission

1. Applications for admission to the M.A. in Environmental Policy program must be made on the appropriate form and submitted to the School of Graduate Studies.
2. The following documents must be submitted in support of the official application form:
a. Letter of appraisal from two referees, at least one of whom is capable of appraising the applicant's academic potential as a graduate student, and at least one of whom is capable of appraising the applicant's professional experience and/or actual or likely success in a career in environmental policy.
b. Official transcripts from each university or other post-secondary institution previously attended, to be sent directly by its Registrar (or equivalent officer) to the School of Graduate Studies. If not recorded on the transcript, official evidence of completion of undergraduate degree must also be submitted.
c. All applicants must submit a one page statement outlining their research interests and are strongly encouraged to identify a supervisor.
d. Application files are normally evaluated after the deadline dates for application noted above and only when all required documentation has been received.
e. Admission shall be by the Dean of Graduate Studies on the recommendation of the GCEP. Upon notification from the Dean of the School of Graduate Studies of acceptance into the M.A. in Environmental Policy program, applicants must give written notice to the School of Graduate Studies of their intention to register.

### 8.10.5 Program of Study

1. Thesis Option: Students in the thesis-based program must complete 15 credit hours in graduate program as specified in Table 1, an internship (ENVP 6030) and a thesis. There are four required courses (representing 12 credit hours) as specified in Table 2. One elective, representing 3 credit hours, related to the student's research specialty is to be completed and may be chosen from Table 3 in consultation with the student's thesis supervisor.
2. Research Paper Option: Students in the research paper-based program must successfully complete 18 credit hours in graduate program courses as specified in Table 1, an internship (ENVP 6030) and a Research Paper (ENVP 6999). There are four required courses (representing 12 credit hours) as specified in Table 2. Two electives, representing 6 credit hours, are to be completed, of which at least one is to be from Table 2. The second elective, related to the student's research specialty, may be chosen from Table 2 or Table 3 in consultation with the student's research paper supervisor.
3. Further courses beyond the minimum number may be required, depending on the background and needs of the student.
4. Students are responsible for fulfilling all prerequisites.
5. All students are required to attend two Workshops:
a. Policy and Science Orientation Workshop

This workshop is held the first week of September each year. Its intent is to provide sfudents with a limited policy or biophysical background with conceptual tools to frame each discipline in order to orient students to the program. The workshop is teamtaught and is three full days in length.

## b. Pre-Internship Workshop

This two-day workshop reviews the internship requirements, aids students in writing resumes and cover letters, discusses interviewing practices and examines student/employer relationships. It is held during the first week after classes end in December of each year.

## 6. Internship Requirements

a. All students are required to complete an environmental policy internship (ENVP 6030) with a relevant government office, nongovernmental organization, community group, or business. Internships are normally selected from a list of approved organizations that is maintained by the Internship Officer and Graduate Officer., Internship placements may be outside the Corner Brook area and possibly outside Newfoundland and Labrador. Final decisions for internship placements rest with the Graduate Officer in consultation with the Internship Officer.
b. Internships are usually completed in the Spring semester of each year.
c. Internships are for full-time employment hours for the duration of the semester ( 12 weeks). Part-time internships over longer periods may be considered and will require approval from the Internship Officer and the Graduate Officer.
d. A competition for internships is organized by the Internship Officer. By entering the competition, students give permission for the Internship Officer to supply their university transcripts to potential employers. Students who do not wish to accept an internship arranged by the Internship Officer shall be responsible for finding an alternative acceptable to the Internship Officer in consultation with the Graduate Officer.
e. Students must attend scheduled pre-internship ofientation workshop, professional development, and exit meeting.
f. Each internship placement is supervised and evaluated by the Internship Officer, the on-site Supervisor assigned by the employer and the Graduate Program Coordinator. The internship shall consist of two components:
i. On-Site Student Performance as evaluated by the Internship Officer in consultation with the on-site Supervisor assigned by the employer.
ii. An Interhship Report graded by the Internship Officer or the Graduate Officer in consultation with the on-site Supervisor assigned by the employer.
g. Evaluation of the Internship shall result in one of the following final grades: Pass, or Fail.

A student must obtain a Pass in both the On-Site Student Performance and the Internship Report to obtain a final grade of Pass. If a student fails to achieve the internship standards specified above, the student may be required to withdraw from the program. Such a student may reapply to the program after a lapse of two semesters, at which time the student will be required to complete a further internship with satisfactory performance before being admitted to any further academic term in the Faculty. An internship may only be repeated once.
h. Students who voluntarily withdraw from the internship without prior approval from the Internship Officer and the Graduate Officer, or who conduct themselves in such a manner as to cause the host organization and the Internship Officer to terminate the placement, will normally be awarded a grade of Fail in the internship.
i. Students âre not permitted to drop internships without prior approval of the Internship Officer in consultation with the Graduate Officer. The Internship Officer will make a recommendation to the Graduate Officer who will make the final decision. Students who drop an internship without permission, who fail to honour an agreement to work with a host organization, or who conduct themselves in such a manner as to cause their discharge from the internship position will normally be awarded a failed grade for the internship. Permission to drop an internship does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved internship in lieu of the one dropped.
7. Students in the M.A. in Environmental Policy shall meet the minimum residency of at least two semesters required under General Regulation, Registration - Period of Study of the University Calendar. Students are encouraged to meet this residency requirement in the first two semesters of their program.
8. All students will be required to present a seminar on their thesis or research paper in the final semester of their program as part of their thesis or research paper requirements. For applicable students, the thesis will be examined in accordance with the General

Regulations - Theses and Reports of the School of Graduate Studies.

### 8.10.6 Evaluation

1. Students for the Master of Arts in Environmental Policy degree must obtain a grade of B or better in all program courses.
2. Students who receive a grade of less than $B$ in a program course will be permitted to remain in the program, provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the GCEP, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

### 8.10.7 Courses

The schedule of courses for the Master of Arts in Environmental Policy is as follows:
Table 1 Master of Arts in Environmental Policy Schedule of Courses

| Term | Thesis Option | Research Paper Option |
| :--- | :--- | :--- |
| Fall Semester 1 | Policy and Science Internship Workshop <br> Two required courses from Table 2 <br> One elective from Table 2 or Table 3 <br> Pre-Internship Workshop | Policy and Science Internship Workshop <br> Two core courses from Table 2 <br> One elective from Table 2 or Table 3 (one elective, either in the <br> Fall or Winter Semester, shall be from Table 2) <br> Pre-Internship Workshop |
| Winter Semester 2 | Two required courses from Table 2 | Two core courses from Table 2 <br> One elective from Table 2 or Table 3 one elective, either in the <br> Fall or Winter Semester, shall be from Table 2) |
| Spring Semester 3 | Environmental Policy 6030 Internship | Environmental Policy 6030 Internship |

Table 2 Master of Arts in Environmental Policy Courses - Grenfell Campus

| Required Courses | Elective Courses |
| :--- | :--- |
| 6000 Foundations of Environmental Policy | 6052 Political Economy, Political Ecology and Policy |
| and Administration | 6053 Ecological Economics |
| 6001 Applied Environmental Problem | 6054 Labour and Environmental Policy |
| Solving: A Case Based Approach | 6055 Environmental Impact Assessment (cross-listed as EVST 4000) |
| 6002 Research Design and Methods | 6056 Risk Assessment and Analysis |
| 6003 Environmental Political Thought | 6057 Energy Policy |
|  | 6058 Management and Regulation of Water Resources |
|  | 6059 Natural Resources Policy and Administration |
|  | $6520-30$ Special Topics Courses |

Table 3 Master of Arts in Environmental Policy - Policy Relevant Courses - St. John's Campus

## Biology

## 7551 Fisheries Resource Management

## Business

8210 Labour Relations
9329 Labour Law

## Economics

6014 Topics in Public Sector Economics
6020 Economics of Nonrenewable Natural Resources
6021 Economics of Renewable Natural Resources
6022 Environmental Economics
6023 Advanced Fisheries Economics
6024 Topics in Resource Economics

## Engineering

9601 Environmental Pollution and Mitigation (cross-listed as
Environmental Science 6004)
9622 Environmental Statistics
9624 Air Pollution (cross-listed as Environmental Science 6008)
9625 Environmental Impacts of Offshore Oil and Gas Operations
9629 Environmental Policy and Regulations
9630 Pollution Prevention
Environmental Science
6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology

Fisheries Resource Management
6003 Fisheries Economics
6004 Fisheries Policy
6005 Fisheries Planning and Development
6006 Business Management for Fisheries
Geography
6204 Sustainable Community and Regional Development
6250 Conservation and Sustainability of Natural Resources
6251 Survey Design, Questionnaire Development and Techniques
of Data Collection
6300 Problems in Fisheries Geography
6500 Cultural Geography
6700 Political Geography

## Medicine

6288 Policy and Decision Making
6722 Environmental Health
Political Science
6710 Intergovernmental Relations
6740 Public Administration
6790 Public Policy Process

## Sociology

6140 The Community
6350 Environmental Sociology

### 8.11 Ethnomusicology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/music
www.mun.ca/hss
www.mun.ca/folklore
The Master of Arts program in Ethnomusicology is administered by the School of Music in consultation with the Department of Folklore, and generally in response to recommendations from an Interdisciplinary Advisory Committee with representation from both academic units, chaired by the Program Co-ordinator.
The Degree of Master of Arts in Ethnomusicology is offered by part-time and full-time study. While it is normally a course work degree, a thesis option is available upon application. Fieldwork is often a requirement both for independent research and course work. The resources of the Memorial University of Newfoundland Folklore and Language Archive are available to graduate students in Ethnomusicology.

### 8.11.1 Qualifications for Admission

Applicants may be admitted to the program if they have at least a B+ average with a B.Mus. Degree or other Degree in the Humanities or Social Sciences with evidence of specialization in music. Applicants whose professional music training took place outside the university system are also encouraged to apply, provided they have the academic equivalent of the qualifications described above. Applicants from a discipline other than Music will be expected to demonstrate the following skills:

- Competent performance in any musical tradition, as judged by a musician knowledgeable about that tradition.
- Knowledge of culturally appropriate language for discussion of performance techniques in that tradition.
- Ability to discuss musical details on the basis of aural and/or written sources, as appropriate to that tradifion.

Applicants for admission may, at the discretion of the Interdisciplinary Advisory Committee, be required to write diagnostic examinations measuring skills and knowledge in music literacy, theory, or aural perception. Applicants with deficiencies in any of these areas may be required to take remedial course work prior or in addition to the required program.

### 8.11.2 Program of Study

The M.A. program will normally be completed within five consecutive semesters of full-time study. The degree is normally taken by completing course work and a major research paper. In special circumstances, a student may apply to complete the degree by completing course work and a thesis. Demonstration of competence in a language other than English may be required if warranted by the research proposed by the student.

## 1. Course Work M.A.

a. Students must normally complete a minimum of 24 credit hours plus a major research paper (Music 7002). Further courses beyond the minimum number may be required, depending on the background of the student. The required courses are:
i. Music 7001; Folklore 6030.
ii. One of Folklore 6100 or Music 6002.
iii. One area or genre studies course ( 3 credit hours) relevant to the research of the student.
iv. Twelve credit hours to be selected from the Music and Folklore courses listed below (with the approval of the Interdisciplinary Advisory Committee); one elective (3 credit hours) may be a relevant course offered in another discipline (with the approval of the Interdisciplinary Advisory Committee).
b. Research paper (Music 7002) on a topic chosen by the student with the student's supervisor's approval. Proposals for topics and supervisors will be vetted by the Interdisciplinary Advisory Committee no later than the beginning of the third term of study. The paper will normally demonstrate the student's ability to apply methodologies and theoretical constructs, learned in the courses taken, to a specific repertory, or performance context.
2. Thesis M.A. (available by special application to the Interdisciplinary Advisory Committee)
a. Students must normally complete a minimum of 21 credit hours plus a thesis. The required courses are:
i. Music 7001; Folklore 6030.
ii. One of Folklore 6100 or Music 6002.
iii. One area or genre studies course ( 3 credit hours) relevant to the research of the student.
iv. Nine credit hours to be selected from the Music and Folklore courses listed below (with the approval of the Interdisciplinary Advisory Committee); one elective (3 credit hours) may be a relevant course offered in another discipline (with the approval of the Interdisciplinary Advisory Committee).
b. Thesis submitted in accordance with General Regulation Theses and Reports of the School of Graduate Studies. A thesis proposal, consisting of a statement of topic, working title, plan of research, and preliminary bibliography, with the name of the preferred Supervisor, shall be submitted by the student to the Interdisciplinary Advisory Committee no later than the beginning of the third term of study.

### 8.11.3 Courses

Theories and Methods:
Music 6001 Research Methods
Music 6002 Graduate Seminar
Music 6807 Video Documentary Production (credit may be received for only one of Music 6807 and Music 7803)
Music 7001 Research Problems and Methods in Ethnomusicology
Music 7002 Research Paper
Music 7803 Radio Documentary Production (credit may be received for only one of Music 6807 and Music 7803)
Folklore 6010 Survey of Folklore Genres and Processes
Folklore 6020 Field and Research Methods
Folklore 6030 Folklore Theories
Folklore 6040 Feminist Theories: Perspectives and Issues
Folklore 6080 Vernacular Theories
Folklore 6090 Ethnology
Folklore 7100 Advanced Folkloristics II: Research and Ethnography

## Form and Performance:

Music 7005 Performance Option
Folklore 6100 Song and Music
Folklore 6120 Ballad
Folklore 6130 Folk Music Canons and Documentary Sound Recordings
Folklore 6200 Folktale
Folklore 6210 Legend
Folklore 6220 Personal Experience Narrative
Folklore 6250 Language and Play
Folklore 6260 Ethnography of Communications
Folklore 6300 Ethnography of Belief
Folklore 6310 Health Systems
Folklore 6350 Custom
Folklore 6360 Traditional Drama
Folklore 6400 Material Culture
Folklore 6410 Vernacular Architecture
Folklore 6420 Art and the Artifact
Folklore 6430 Food and Culture
Folklore 6720 Folklore and Literature

## Area and Genre Studies:

Music 7010 World Music: Music of Asia and Oceania
Music 7011 World Music: Music of Africa and the Americas
Music 7012 Canadian Musical Traditions
Music 7013 Music and Culture
Music 7017 Folksong
Music 7018 Jazz and Blues: The Roots of Popular Music
Folklore 6120 Ballad
Folklore 6600 Folklore of Newfoundland
Folklore 6610 Folklore of Canada
Folklore 6620 Folklore of the United States
Folklore 6630 Folklore of the British Isles
Folklore 6770 The Global and the Local

## Social Identities:

Music 7006 Urban Ethnomusicology
Music 7007 Music in the Study of Gender, Race and Class
Music 7009 Music and Place
Music 7802 Music and Intercultural Processes
Folklore 6510 Occupational Folklore
Folklore 6551 Indigenous Expressive Cultures in Cross-cultural Encounter
Folklore 6730 Folklore and Gender
Folklore 6780 Ethnicities

## Public and Applied Ethnomusicology and Folklore:

Music 6700 Career Skills for Musicians
Music 6750 Music Industries Internship (2 credit hours)
Folklore 6740 Public Sector Folklore
Folklore 6760 Archiving
Folklore 6790 Museums: Perspectives and Practices
Folklore 6800 Applied Folklore

## Interdisciplinary Perspectives:

Music 7008 Media Studies
Folklore 6700 Folklore and Culture
Folklore 6710 Oral Tradition and Oral History
Folklore 6750 Popular Culture: Theory and Debate
Independent Study:
Music 7026-29 Directed Reading in Ethnomusicology
Folklore 6570-79 Reading Courses in Folklore

## Special Topics:

Music 6800-09 Special Topics in Music (excluding Music 6807)
Music 7800-09 Special Topics in Music (excluding Music 7802 and 7803)
Folklore 6511-29 Special Topics in Folklore
Folklore 6570-79 Reading Course in Folklore

### 8.12 Folklore

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www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/folklore
The Degree of Master of Arts in Folklore is offered by part-time and full-time study. The program normally requires extensive fieldwork research in Newfoundland and/or the Maritimes.
Integral to the teaching of the Department of Folklore is work of the Memorial University of Newfoundland Folklore and Language Archive.

### 8.12.1 Program of Study

1. Applicants may be admitted to the graduate program if they have an average of at least grade ' $B$ ' in no fewer than 36 credit hours in Folklore or in any other discipline in the Humanities or Social Sciences.
2. The M.A. program will normally be completed within six consecutive semesters (i.e., a two-year period). The Degree of Master of Arts in Folklore may be taken by course work and comprehensive examination, course work and thesis, or course work and co-
operative education work terms. All options are available to full-time and part-time students. However, the work term component of option C cannot be completed on a part-time basis.
a. M.A. With Thesis:
i. Students choosing to do the M.A. with thesis must normally complete a minimum of 24 credit hours plus a thesis. Normally, the required courses are:

- 6010, 6020, and 6030, normally taken as an integrated foundation in the Fall semester.
- At least one of the following: 6060, 6100, 6120, 6130, 6200, 6210, 6220, 6250, 6260, 6360, 6720 .
- At least one of the following: 6070, 6300, 6310, 6350, 6370, 6400, 6410, 6420, 6430.
- Nine additional credit hours to be selected from courses in the groups listed above or from the other courses offered by the Department.
ii. A brief thesis pre-proposal, including a statement of topic, working title, plan of research, ethics statement, preliminary bibliography, and the name of a preferred Supervisor, shall be submitted no later than the end of the student's second semester. A full proposal shall normally be submitted to the Department of Folklore and orally presented before members of the faculty by the end of the student's fourth semester. The written thesis proposal should be made available to faculty members at least two weeks prior to the scheduled date of a student's oral presentation of the proposal. Following approval of the thesis proposal and consultation with the student, the Supervisor and thesis topic will be recommended to the Dean.


## b. M.A. With Comprehensive Examination:

i. Students choosing to do the M.A. with comprehensive examination must normally complete a minimum of 30 credit hours plus comprehensive examination. Normally, the required courses are:

- 6010, 6020, and 6030, normally taken as an integrated foundation in the Fall semester.
- At least one of the following: 6060, 6100, 6120, 6130, 6200, 6210, 6220, 6250, 6260, 6360, 6720.
- At least one of the following: 6070, 6300, 6310, 6350, 6370, 6400, 6410, $6420,6430$.
- Fifteen additional credit hours to be selected from courses in the groups listed above or from the other courses offered by the Department.
ii. Each student selecting the M.A. with comprehensive examination option shall normally submit, by the end of the student's second semester, written notification of intention to take comprehensives.
iii. Each student selecting this option shall normally write the comprehensive examination at the end of the student's fifth semester in the program. The comprehensive examination will be graded by a comprehensive examination committee appointed by the Dean of Graduate Studies on the recommendation of the Head of the Department, in accordance with General Regulations governing the School of Graduate Studies.
c. M.A. With Public and Applied Folklore Co-operative Education Work Terms:
i. Students choosing to do the M.A. with Public and Applied Folklore Co-operative Education option must normally complete a minimum of 24 credit hours plus two co-operative education work terms. Normally the required courses are:
- 6010, 6020, and 6030, normally taken as in integrated foundation in the Fall semester.
- 6740 or 6800 and at least one additional course selected from the followingः $6551,6740,6760,6790,6800$.
- At least one of the following: $6060,6100,6120,6130,6200,6210,6220,6250,6260,6360,6720$.
- At least one of the following: $6070,6300,6310,6350,6370,6400,6410,6420,6430$.
- Three additional credit hours to be selected from courses in the groups listed above or from the other courses offered by the Department.
- 601W and 602W
ii. The dates for starting and finishing each work term are shown in the University Diary.
iii. A competition for work term employment is organized by Co-operative Education in cooperation with the Department of Folklore. Students may also obtain their own work term jobs outside the competition. Such jobs must be confirmed by letter from the employer and approved by the Head of Folklore and Co-operative Education on or before the first day of the work term. Work term jobs may be outside St.John's and possibly outside Newfoundland and Labrador. Students who do not wish to accept a work term job arranged by Co-operative Education shall be responsible for finding an alternative acceptable to the Head of Folklore and Co-operative Education. By entering the competition, students give permission for Co-operative Education to supply their Memorial University of Newfoundland transcripts to potential employers.
iv. Each work term placement will be supervised by the student's program Supervisor, the on-site Supervisor assigned by the employer, and Co-operative Education. The overall evaluation of the work term is the responsibility of the program Supervisor, on-site Supervisor, and Co-operative Education. The work term shall consist of two components:
- On-the-job Student Performance as evaluated by the on-site Supervisor and Co-operative Education, in consultation with the program Supervisor.
- A Work Report graded by the program Supervisor in consultation with the on-site Supervisor.

Evaluation of the work term will result in the assignment of one of the following final grades:

- Pass with Distinction: Indicates EXCELLENT PERFORMANCE in both the work report and work performance.
- Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and work performance.
- Fail: Indicates FAILING PERFORMANCE in the work report and/or the work performance.

If a student fails to achieve a final grade of Pass or Pass with Distinction, and provided the student has not failed to achieve a grade of ' $B$ ' or better in any program course, the student may request to repeat the work term component. The request will be considered by the Department Head in consultation with the program Supervisor and must include a proposal for a new work term placement. Only one work term repeat will be permitted in the student's program. Alternatively, the student may apply for a change of route to the thesis or comprehensive examination program option.

### 8.12.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, normally after consultation with the Head of the Department or the Graduate Studies Administrator, and as far as the resources of the Department will allow. Courses are structured according to the categories of: Theories and Methods, Issues, Form and Performance, Special Topics, Regional, National and International Heritage, Social Identities, Public and Applied Folklore, Interdisciplinary Perspectives, and Required (Ph.D.):

## Co-operative Education Work Terms

601W Work Term I
602W Work Term II

## Theories and Methods

6010 Survey of Folklore Genres and Processes
6020 Field and Research Methods (may be offered in accelerated format)
6030 Folklore Theories
6040 Feminist Theories: Perspectives and Issues
6080 Vernacular Theories
6090 Ethnology

## Issues

6050 Issues in Folkloristics
6060 Issues in Oral Tradition and Performance
6070 Issues in Folklife
Form and Performance
6100 Song and Music
6120 Ballad
6130 Folk Music Canons and Documentary Sound Recordings
6200 Folktale
6210 Legend
6220 Personal Experience Narrative
6250 Language and Play
6260 Ethnography of Communications
6300 Ethnography of Belief
6310 Health Systems
6350 Custom
6360 Traditional Drama
6370 Ritual, Festival and Public Display
6400 Material Culture
6410 Vernacular Architecture
6420 Art and the Artifact
6430 Food and Culture
6720 Folklore and Literature

## Special Topics

6511-29 Special Topics in Folklore
6550 Special Research in Folklore
6551 Indigenous Expressive Cultures in Cross-cultural Encounter
6552-69 Special Research in Folklore
6570-79 Reading Course in Folklore

## Regional, National and International Heritage

6600 Folklore of Newfoundland
6610 Folklore of Canada
6620 Folklore of the United States
6630 Folklore of the British Isles
6640 Traditional Culture of Scotland
6650 Culture and Traditions of Ireland
6660 Folklore of the Francophone Regions


6690 International Folklore
Social Identities
6510 Occupational Folklife
6730 Folklore and Gender
6770 The Global and the Local
6780 Ethnicities
Public and Applied Folklore
6380 Perspectives on Cultural Tourism
6740 Public Sector Folklore
6760 Archiving
6790 Museums: Perspectives and Practices
6800 Applied Folklore
Interdisciplinary Perspectives
6700 Folklore and Culture
6710 Oral Tradition and Oral History
6750 Popular Culture: Theory and Debate
Required (PhD.)
7000 Advanced Folkloristics I
7100 Advanced Folkloristics II Research and Ethnography
Note: Credit may not be obtained for both 6010 and the former 6110; 6020 and the former 6111; 6030 and the former 6112; 6100 and the former 6430; 6120 and the former 6445; 6300 and the former 6230; 6350 and the former 6230; 6400 and the former 6501; 6720 and the former 6460.

### 8.13 French

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/languages

### 8.13.1 Program of Study

1. The Degree of Master of Arts in French Studies may be completed by full-time or part-time study. "French Studies" may take the form of the study of the French language or of francophone literature, including the study of literary history, criticism, or theory. It may also include the study of French-language cinema or of other aspects of francophone civilization.
2. Students who are practicing teachers of French and wish to pursue French studies in conjunction with studies of the teaching of French may opt to pursue the Master of Arts and Education (Education and Francophone Literatures and Cultures) degree jointly offered by the Faculty of Humanities and Social Sciences, Department of Modern Languages, Literatures and Cultures, and the Faculty of Education.
3. Applicants for the M.A. program in French Studies are normally expected to have completed the Honours Degree with a secondclass standing or better. An applicant who does not hold an Honours Degree or its equivalent may be required to complete such additional undergraduate courses as the Department considers necessary, prior to admission or as part of the program.
4. The M.A. program in French Studies will consist of 15 credit hours in graduate courses (normally requiring 2 or 3 semesters of fulltime study), plus research activities and a thesis of approximately 80 pages. The 15 credit hours shall include 6008 and 6009 , normally completed in consecutive semesters. The remaining 9 credit hours shall be obtained by completion of three courses chosen from those in three of the five groups listed in the Courses section below. The language of the thesis will be French. The thesis proposal, after being approved by the Supervisor, will be submitted by the student, normally before the end of the third semester of studies, to the Departmental Graduate Studies Committee, who will decide whether or not to grant its approval.
5. Each student's program of study must be approved by the Departmental Graduate Studies Committee.
6. A paper drawn from the thesis will be presented at a Departmental seminar or in another forum approved by the Departmental Graduate Studies Committee. Normally, this presentation will take place at some time between submission of the final draft thesis to the Supervisor and the submission of the thesis to the School of Graduate Studies.
7. The approval of the Departmental Graduate Studies Committee must be obtained before the thesis is forwarded to the School of Graduate Studies for examination.
8. In the final version of the M.A. thesis and other written assignments for M.A. courses, the quality of written French must be of a standard acceptable to the Department as represented by the Graduate Studies Committee. Normally, this will mean that the final version of such assignments will be free of spelling, lexical, and grammatical errors, and of improper use of stylistic conventions. In the case of the M.A. thesis, this requirement applies to the version submitted for examination.

### 8.13.2 Courses

A selection of the following graduate courses will be offered to meet students' requirements, as far as the resources of the Department will allow. Individual courses, excluding French 6900, may be offered in accelerated format outside of the regular semester of session time frame when being delivered as part of the Summer Institute for French Teachers (SIFT):
6008* Literary Methodology and Theory I
6009* Literary Methodology and Theory II
Historiographical, Genetic, Thematic, Hermeneutical or other historical or critical approaches to French Studies
6032 Genetic Criticism and Exegesis
6102 History of the French Language
Psychoanalytical, Ethnological or Anthropological approaches to French Studies
6020 Literature and Psychoanalysis
6021 Mythocriticism
6130-39 Personal/Intimate Literature
Sociological or Socio-historical approaches to French Studies
6022 History, Society, Ideology and Texts
6101 The Female Voice: Women's Writing and its Contribution to the Development of French and Francophone Texts
6110-19 Paraliterature and Traditional Culture
Linguistic, Semiotic, Poetic, Rhetorical or Pragmatic approaches to French Studies
6011 General Theory of the French Language
6030 Grammar of the Text
6031 Narratology
6140-49 Genres and Discursive Forms
Other approaches to French Studies
6120-29 Texts/Images/Sounds
6150-59 Special Topics
French and Spanish Courses for Students in Other Disciplines
French 6900 Reading in French
Spanish 6900 Reading in Spanish
Note: *Credit may not be obtained for both French 6008 and the former French 6006; or for both French 6009 and the former French 6006.

## Français

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/languages

1. Le diplôme de Maîtrise ès Arts en Études françaises sanctionne des études à temps plein ou à temps partiel. Les études françaises comprennent l'étude de la langue et de la littérature et l'étude de l'histoire, de la critique ou de théorie littéraire, ainsi que l'étude du cinéma ou d'autres aspects des civilisations francophones.
2. Les enseignants et enseignantes de français qui veulent poursuivre leurs études en français et en didactique du français peuvent choisir le programme de Maîtrise ès Arts et Éducation (Enseignement des litératures et cultures francophones) offerte par la Faculté des Humanités et des Sciences Sociales, Département de langues, littératures et cultures modernes et la Faculté d'Éducation et la

Faculté d'Éducation.
3. Pour être admis au programme de Maîtrise ès Arts en Études françaises, l'étudiant doit normalement détenir un diplôme de baccalauréat avec une spécialisation en Études françaises et une note moyenne d'au moins B. Le département pourra obliger toute personne ne détenant pas ce diplôme ou son équivalent à suivre certains cours du premier cycle avant d'être admis au programme de deuxième cycle ou pendant ses études de maîtrise.
4. L'option en Études littéraires comprend quinze crédits de cours, ce qui exigera normalement 2 ou 3 trimestres d'études à temps plein et un mémoire d'environ 80 pages rédigé en français. Tous les candidats compléteront et le Fr. 6008 et le Fr. 6009.
Normalement, ces deux cours devront être complétés en deux trimestres consécutifs. En plus, il faudra compléter 3 cours choisi parmi ceux qui font partie de 3 des 5 groupes identifiés dans la section COURS. Le projet de mémoire, qui est approuvé par son directeur, doit être officiellement présenté par le candidat au Comité des Études de deuxième cycle, avant la fin du troisième trimestre, pour son approbation.
5. Le programme d'études du candidat doit être approuvé par le Comité des Études de deuxième cycle.
6. Une communication tirée du mémoire sera présentée dans le cadre des séminaires départementaux ou dans une autre réunion approuvée par le Comité des Études de deuxième cycle. Normalement, cette présentation se fera entre la soumission à son directeur et sa soumission définitive à l'École des Études supérieures.
7. Avant d'être soumis à l'École des Études supérieures, le mémoire doit être proposé au Comité des Études de deuxième cycle, qui doit en autoriser le dépôt.
8. Dans la version finale du mémoire et des autres travaux préparés pour les cours de maîtrise, la qualité du français écrit doit être d'un niveau acceptable au département, qui est représenté par le Comité des Études de deuxième cycle. Ainsi, la version finale de ces travaux ne contiendra-t-elle pas, normalement, d'erreurs orthographiques, lexicales, grammaticales, stylistiques et protocolaires. Pour ce qui est du mémoire, cette exigence s'applique à la version remise aux examinateurs.

## Cours

Un choix des cours de deuxiéme cycle suivants sera offert afin de répondre aux besoins des étudiants inscrits au programme de maîtrise selon les ressources disponibles au department. Certains cours, excepté le Français 6900, peuvent être enseignés sous format accéléré en dehors du calendrier habituel d'un semestre ou d'une session quand ils sont offerts dans le cadre de l'Institut d'Été pour les Enseignants de Français (SIFT, Summer Institute for French Teachers):
6008* Méthodologie et théorie de la littérature I
6009* Méthodologie et théorie de la littérature II
Approche historiographique, génétique, thématique, herméneutique ou autrement historique ou critique: )
6032 Génétique et critique
6102 Histoire de la langue française
Approche psychanalytique, ethnologique ou anthropologique:
6020 Psychanalyse et littérature
6021 Mythocritique
6130-39 Littérature personnelle/intime
Approche sociologique ou socio-historique:
6022 Histoire, société, idéologie et textes
6101 La voix féminine et le féminisme
6110-19 Paralittérature et cultures traditonnelles
Approche linguistique, sémiotique, poétique, rhétorique ou pragmatique:
6011 Théorie générale de la langue française
6030 Grammaire du texte
6031 Narratologie
6140-49 Discours et genres
Autres approches aux Études françaises:
6120-29 Textes/Images/Sons
6150-59 Sujets spéciaux

## Cours de français et d'espagnol pour étudiants d'autres disciplines

Français 6900 Lecture en françâis
Espagnol 6900 Lecture en espagnol

* Nota / Note: Les étudiants ne peuvent obtenir de crédit pour le Français 6008 et le Français 6006 (désormais supprimé) ni pour le Français 6009 et le Français 6006.


### 8.14 Geography

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/geog

### 8.14.1 Program of Study

1. The degrees of Master of Arts and Master of Science are offered in Geography by full-time or part-time study.
2. Admission requirements are set forth in the General Regulations of the School of Graduate Studies and Degree Regulations for Master of Arts and Master of Science.
3. The deadline for submission of applications for admission is January 15. Students will normally commence their programs in the Fall semester.
4. An applicant will be admitted to a graduate program only if a faculty member agrees to act as Supervisor. A supervisory committee will be established after admission, normally consisting of the Supervisor and two other individuals, one of whom will normally be a member of the Department.
5. Major research areas for graduate study at the master's level are cultural, political, historical, economic, urban, resource management, community and regional development, geomorphology, Quaternary environments, climatology, and geographic information sciences.
6. Students will register for the M.A. program if their fields of interest lie in an area of Human Geography or for the M.Sc. if their fields of interest are in Physical Geography or Geographic Information Sciences.
7. It is expected that the program of study and research for the M.A. or M.Sc. will normally be completed in a maximum of two years of full-time work, or three years of part-time work.
8. Students must successfully complete a minimum of 12 credit hours of graduate program courses with a minimum grade of $B$ in each. Geography 6000 and 6001 will be required courses for all students who have not already completed equivalent courses at the Honours or post-graduate level.
9. Students whose undergraduate degree is not in geography will normally be required to complete some additional undergraduate program courses during their first year of study, in addition to the required graduate program courses. Normally four such undergraduate courses will be required, and a minimum grade of $70 \%$ must be obtained in each.
10. Each student will be required to present a seminar on the student's research to the Department.
11. Each student must submit a thesis based on the student's own original research. This thesis will be examined in accordance with the General Regulations of the School of Graduate Studies.

### 8.14.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.
6000 Development of Geographical Thought and Practice I
6001 Development of Geographical Thought and Practice II
6002 Directed Readings in Geography
6100 Research Techniques in A Selected Field of Geography I
6101 Research Techniques in A Selected Field of Geography II
6120 Geospatial Modelling and Analysis
6150 Environmental Remote Sensing and Image Analysis
6200 Economic Geography I
6201 Economic Geography II
6204 Sustainable Community and Regional Development
6250 Conservation and Sustainability of Natural Resources
6251 Survey Design, Questionnaire Development and Techniques of Data Collection
6300 Problems in Fisheries Geography
6400 Fluvial Geomorphology
6401 Glacial Geomorphology
6402 Coastal Geomorphology
6410 Climatology
6420 Quaternary Geography
6430 Biogeography
6500 Cultural Geography
6600 Historical Geography
6700 Political Geography
6800 Urban Geography
6821 Advanced Computer Mapping
6900 Graduate Seminar in Regional Geography
6990-95 Special Topics in Geography

### 8.15 German

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss
www.mun.ca/languages

### 8.15.1 Program of Study

The degree of Master of Arts (M.A.) is offered in German Language and Literature and may be taken by full-time or part-time study.

1. Students for the M.A. degree in German are normally expected to have completed an Honours degree with a minimum of secondclass standing. An applicant who does not hold an Honours Degree or its equivalent may be required to complete such additional undergraduate courses as the Department considers necessary, prior to admission or as part of the program.
2. Applicants will be required to demonstrate superior German language skills as determined by the Department prior to admission to the program. As part of the admission process, prospective students must therefore submit a writing sample in German. An interview may also be part of the admission process.
3. As part of the admissions process, prospective students must submit a non-binding outline of the area in which they would like to write their thesis.
4. Normally, the M.A. program should take two academic years to complete, of which the first three semesters will be spent in completing course work, writing and orally defending a thesis proposal, and beginning to carry out research. The following three semesters will be spent in completing research and a thesis.
5. Students will be required to complete at least 15 credit hours in course work. Of these 15 credit hours,
a. all students will be required to complete 3 credit hours in LING 7000;
b. all students will be required to complete 9 credit hours in designated GERM graduate courses;
c. all students will be required to complete 3 credit hours in a graduate level course from either GERM or another program within the Faculty of Humanities and Social Sciences, to be approved by the graduate committee.

### 8.15.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Topics in Modern Technology, Literature and Culture
6001 The Other in German-language Literature and Culture
6100 Topics in the History of the German Language
6103 Bibliography and Research Methods
6200 Issues in Early German Literature and Culture I
6201 Topics in Early German Literature and Culture II
6300 Topics in Early Modern German Literature and Culture I
6301 Topics in Early Modern German Literature and Culture II
6800 Topics in Modern German Literature and Culture I
6801 Topics in Modern German Literature and Culture II
6900 Topics in Contemporary German Literature and Culture I
6901 Topics in Contemporary German Literature and Culture II
6903 Propaganda and Censorship
7000 Special Subject or Author I
7001 Special Subject or Author II
7002-7020 Special Topics in German Studies

### 8.16 History

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/history
The degrees of Doctor of Philosophy and Master of Arts are offered in History by full-time or part-time study.

### 8.16.1 Program of Study



1. The Department of History offers M.A. programs in a broad range of geographical and thematic areas. Students in the M.A. program will choose a thesis or non-thesis option.
2. M.A. students who choose the non-thesis option shall complete a minimum of 24 credit hours, 18 of which shall normally be 6190 , 6200, and 6999.
3. M.A. students who choose the thesis option shall complete 9 credit hours, 6 of which shall normally be 6190 and 6200 , plus a thesis.
4. Students will be required to successfully complete HIST 6190 prior to taking HIST 6200.
5. Students will be required to successfully complete HIST 6200 before writing the Major Research Paper or thesis.
6. Where a student's major research project requires the student to read a language other than English, the student must demonstrate a reading knowledge of this language through an exam or other method subject to the approval of the Graduate Committee.

### 8.16.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.
6000 Advanced Studies in Newfoundland History
6010 Advanced Studies in Canadian History
6020 Advanced Studies in the History of the United States
6030 Advanced Studies in French History
6040 Advanced Studies in British History
6050 Advanced Studies in German History
6060 Advanced Studies in North Atlantic History
6070 Advanced Studies in Social History
6075 Advanced Studies in Labour and Working-Class History
6080 Advanced Studies in Intellectual History
6090 Advanced Studies in Women's History
6095 Advanced Studies in Ethnohistory
6100 Advanced Studies in Military History
6105 Advanced Studies in Diplomatic History
6110 Advanced Studies in Maritime History
6120 Advanced Studies in Economic and Business History
6125 Medical Science and Social Responsibility in Health Care: Aspects of Medical History (cross-listed as Medicine 6420)
6130 Quantification and Measurement in History
6140-59 Research in Special Topics
6160-79 Reading Courses (Special Topics)
6190 Theory and Method
6200 Masters Seminar 1
6999 Masters Research Paper (12 credit hours)

### 8.17 Linguistics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/linguistics
The degrees of Master of Arts and Doctor of Philosophy are offered in Linguistics.

### 8.17.1 Program of Study

1. The Linguistics Department offers the M.A. program with both a thesis and a non-thesis option. The M.A. with thesis option is intended for those who have completed an undergraduate major in Linguistics with satisfactory standing (a B+ average in Linguistics courses). Students interested in the thesis option who have an excellent undergraduate record and a well-defined research plan, yet who do not possess the equivalent of an undergraduate major, will be required to take additional undergraduate and/or graduate courses in Linguistics. Other students are encouraged to apply for the M.A. without thesis option.
2. The M.A. with thesis option is normally a two-year program consisting of at least 15 credit hours of graduate courses (including Linguistics 7000 and 7001), plus a thesis.
3. The M.A. without thesis option is normally a two-year program consisting of at least 21 credit hours of graduate courses (including Linguistics 7000 and 7001), plus a research project (Linguistics 6999), which consists of a major research paper in an approved area followed by an oral examination.
4. The M.A. in Linguistics requires proficiency in a language other than the student's first language, as demonstrated by a minimum $B$ grade in a second-year undergraduate language course, or performance satisfactory to the Department in an arranged reading proficiency test. A working or structural knowledge of other languages may also be required for particular programs (e.g., Latin, Greek or Sanskrit for historical Indo-European linguistics, or courses in the series Linguistics 6050-59 or the former 6010-6041).
5. All M.A. students are advised to consult the Linguistics department's Graduate Handbook for details on program requirements and for general information relating to the graduate program.

### 8.17.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow. Full information is to be found in the Department's Graduate Handbook.
6050-54 Structure of a North American Aboriginal Language (credit restriction: Except where an exemption is supplied by the Head of the Department, a student may not obtain credit for more than one course in the 6050-54 series. Students may not obtain credit for any of the previously offered 6010, 6011, 6020, 6021, 6030, 6031, 6040, 6041 in addition to a course in the 6050-54 series.)
6055-59 Structure of an Uncommonly-Taught Language (credit restriction: Except where an exemption is supplied by the Head of the Department, a student may not obtain credit for more than one course in the 6055-59 series.)
6100 Issues in Morphosyntax (credit may not be obtained for both Linguistics 6100 and the former 6001)
6110 Selected Topics in Transformational Grammar
6115 Topics in the Syntax of a Selected Language (prerequisite: 6001 or 6110)
6150 Principles of Language Acquisition
6151 Selected Topics in Language Acquisition (prerequisite: Permission of the instructor)
6200 Phonological Theory
6201 Selected Topics in Phonology (prerequisite: 6200)
6210 Sociolinguistics (credit restriction: a student may not obtain credit for both 6210 or the former 6211)
6212 Selected Topics in Language and Gender
6220 Areal and Temporal Variations in Language
6300-9 Special Subjects
6350 General Romance Linguistic
6390 Franco-Canadian


6400 Comparative and Historical Linguistics
6401 Morphosyntactic Change (prerequisite. 6400)
6403 Etymology (cross-listed as English 6403)
6410 Comparative Structure of a Selected Language Family (prerequisite: 6403 or the former 6011, 6031)
6420 English Dialectology I
6421 English Dialectology II
6430 Selected Topics in Linguistic Variation (prerequisite: 6220 or the former 6211)
6500 Field Methods
6601 Modern Linguistic Theories
6700 Experimental Phonetics
6701 Selected Topics in Experimental Phonetics (prerequisites: 6200, 6700)
6800 Selected Topics in Morphology
6880 Selected Topics in Semantics
6999 M.A. Research Project
7000 Seminar in Research Methods
7001 Analytical Issues in Linguistics
7100 Topics in North American Native Languages (prerequisites: a course from series 6050-6054 or the former 6011, 6031, 6041)
7200 Advanced Topics in Syntax (prerequisites: 6110, plus either 6001 or 6115)
7400 Seminar in Comparative and Historical Linguistics (prerequisite: 6400 or 6410)
7430 Seminar in Linguistic Variation (prerequisite: 6430)
7800 Seminar in Morpho-semantics (prerequisite: 6800)
7900-03 Special Topics in Linguistics
Note: Appropriate equivalent credits may be given for courses taken at the Summer Institute of the Linguistic Society of America, or a similar institute. Students are encouraged to attend these institutes. They should, however, consult the Head of the Department as to what courses may be appropriate for credit.

### 8.18 Philosophy

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/philosophy

### 8.18.1 Program of Study

The Degree of Master of Arts is offered in Philosophy by full-time or part-time study. The program is designed so that it may be completed in one academic year (three semesters) of full-time study.
The student must complete 18 credit hours - 3 credit hours from 6000, 12 credit hours from 6011-6016, any 3 credit hours from 61016102 - and a thesis.
Normally, a full-time student will complete all the 18 credit hours and submit a thesis proposal by the end of the second semester of study. A minimum of one additional semester will be spent in completing the balance of the program.

### 8.18.2 Courses

6000 Graduate Seminar

## Author Seminars

6011 Ancient and Medieval Philosophy
6012 Modern Philosophy
6013 Contemporary Philosophy

## Area Seminars

6014 Metaphysics
6015 Theory of Knowledge
6016 Ethical and Political Theory

## Tutorials

6040-6099 Special Topics
6101 Selected Texts
6102 Current Issues

### 8.19 Political Science

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss
www.mun.ca/posc

### 8.19.1 Program of Study

The Degree of Master of Arts is offered in Political Science by full-time and part-time study.
The degree of Master of Arts (M.A.) in Political Science may be taken by course work and thesis, course work and internship, or course work and research paper. The thesis, internship, and research paper options are available to full-time students. The M.A. with thesis is a two-year program. The internship and research paper options are one year programs for full-time students. The thesis and research paper options are open to part-time students.

1. M.A. with Thesis:
a. Students choosing the M.A. with thesis must complete a minimum of 12 credit hours in political science graduate program courses of which 3 credit hours must be attained from either POSC 6000 or 6010 . Further courses beyond the minimum number may be required, depending on the background and needs of the student.
b. Each student choosing the thesis option will submit a thesis on a subject that has been approved by the supervisory committee of the Department.
c. Students applying for the thesis option must submit a brief (one page maximum) statement of their research interest with their application.
2. M.A. with Internship:
a. Students choosing the M.A. with internship must complete a minimum of 24 credit hours in political science graduate program courses of which 12 credit hours must be attained from POSC 6030, 6031, and 6790 and 3 credit hours must be attained from either POSC 6000 or 6010 . Further courses beyond the minimum number may be required, depending on the background and needs of the student.
b. Each student choosing this option will complete, normally in the Spring semester, a one-semester, full-time internship, 6030, with a political organization, government agency, or voluntary agency. Students registering for 6030 must also register for its corequisite, 6031. The placement must normally be selected from a list of approved organizations that is maintained by the Department.
3. M.A. with Research Paper:
a. Students choosing the M.A. with research paper must complete a minimum of 24 credit hours in political science graduate program courses of which 9 credit hours must be attained from either POSC 6999 and 3 credit hours must be attained from POSC 6000 or 6010.
b. The selection of a topic for the research paper must be approved by a faculty supervisor who will be chosen in consultation with the Department Head. The paper will be graded by the supervisor and one other member of the faculty, either from within the Department or the Department of a cognate discipline.

### 8.19.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Political Science Concepts
6010 Political Science Methods
6020 Research Design
6030 Internship

6031 Applied Political Research (6 credit hours)
6100 Political Philosophy
6200 International Politics
6300 Comparative Politics
6301 European Politics and Public Policy
6350 Political Economy
6400 Political Development
6430 Latin American Politics
6500 Political Behaviour
6600 Newfoundland Politics
6700 Canadian Politics
6710 Intergovernmental Relations
6720 Local Politics
6740 Public Administration
6770 Canadian Provincial Politics
6780 Politics of the Atlantic Provinces
6790 Public Policy Process
6900-10 Special Topics
6999 Master's Essay (9 credit hours)

### 8.20 Religious Studies

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/relstudies

### 8.20.1 Program of Study

1. Thesis Option

a. Normally, the Master of Arts program with thesis option should take two years to complete, the first of which is to be spent primarily on course work and preparation of a thesis proposal. A student accepted on a part-time basis would normally be expected to take three to five years to complete the program.
b. Students in the M.A. program with thesis option shall normally complete a thesis and a minimum of 12 credit hours in course work.
c. Students are encouraged to visit the Department of Religious Studies website at www.mun.ca/relstudies/programs/graduate/ for a list of possible research areas.
d. Before a student begins writing a thesis, the student should submit a research proposal to the Graduate Studies Committee of the Department for approval.
e. Students in the M.A. with thesis option must complete four required courses: RS 6100 Methods and Theories in Religious Studies; RS 6110 Thesis Writing; RS 6120 Studies in Religious Texts; and RS 6130 Religious Contexts.

## 2. Course-based M.A. with a Project Option

a. Normally, the Master of Arts program with a project option should take one year (three semesters) to complete, the first two semesters spent on course work and the third semester on completing the project.
b. Before a student begins writing a project, the student should submit a research proposal to the Graduate Studies Committee of the Department for approval.
c. Students in the M.A. with a project option must complete five required courses and at least one other course. This may be from a cognate discipline (upon approval of the supervisor). The five required courses are: RS 6100 Methods and Theories in Religious Studies; RS 6110 Thesis Writing; RS 6120 Studies in Religious Texts; RS 6130 Religious Contexts; and RS 699A/B Advanced Research in Religious Studies.

### 8.20.2 Courses

6100 Methods and Theories in Religious Studies (credit may not be obtained for both Religious Studies 6100 and the former Religious Studies 6000)
6110 Thesis Writing
6120 Studies in Religious Texts
6130 Religious Contexts
6220 Selected Topics in New Testament
6230 Selected Topics in Hebrew Bible/Old Testament
6330 Selected Topics in Judaism
6340 Selected Topics in East Asian Religious Traditions
6350 Selected Topics in South Asian Religious Traditions
6720 Selected Topics in the History of Christianity
6730 Selected Topics in the Religious History of Canada
6740 Selected Topies in the Religious History of Newfoundland and Labrador
6750 Selected Topics in Medieval Religious Thought
6820 Selected Topics in Christian Ethics
6830 Selected Topics in Religion and Culture
6840 Selected Topics in the Philosophy of Religion
6850 Selected Topics in New Age Religious Movements
6900-6910 Special Topics in the Study of Religion
699A/B Advanced Research in Religious Studies (9 credit hours)

### 8.21 Sociology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/soc
The Degrees of Master of Arts and Doctor of Philosophy can be earned through full-time or part-time study. Area of department specialization include: Social Theory; Sociology of Culture; Criminology; Environmental Sociology; Social Inequality; Sociology of Gender; Sexuality; Health, including Occupational Health; Development; Work; Political Sociology; and Maritime Sociology. Graduate courses are taught as tutorials or small seminars.

### 8.21.1 Program of Study

1. Minimum admission requirements are a $B$ average in undergraduate studies with a good undergraduate background in Sociology.
2. The M.A. Degree with thesis requires the completion of 15 credit hours in graduate courses, normally including the Sociology Graduate Seminar (6880), Advanced Quantitative Methods (6040), Advanced Qualitative Methods (6041), Social Theory (6150), one elective, and a thesis. In the case of full-time students, the M.A. with thesis is normally completed in two years. The first year is devoted to the completion of the required courses and the definition of the thesis research topic. The second year is devoted to the completion of the thesis and presentation of the thesis at a Department seminar.
3. The M.A. Degree by Master's Research Paper requires the completion of 24 credit hours, normally including the Graduate Seminar (6880), Advanced Quantitative Methods (6040), Advanced Qualitative Methods (6041), Social Theory (6150), two electives, and the Master's Research Paper (6900). The coursework should be taken during the first two semesters of full-time study. The Master's Research Paper (Sociology 6900) should be written in the third semester of full-time study. The Master's Research Paper will be supervised by a faculty member and must be presented at a Departmental seminar. The Supervisor and one other member of the Department will grade the Master's Research Paper.

### 8.21.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6040 Advanced Quantitative Methods
6041 Advanced Qualitative Methods
6042-49 Special Topics in Advanced Sociology
6090-94 Special Area in Sociology
6120 Social Organization
6130 Social Stratification
6140 The Community
6150 Social Theory
6160 Theory Construction and Explanation in Sociology
6240 Sociology in Medicine
6280 Social and Economic Development
6300 Maritime Sociology
6310 Political Sociology
6320 Gender and Society
6330 Science and Technology
6340 Comparative North Atlantic Societies
6350 Environmental Sociology
6360 Sociology of Work
6370 Feminist Theory and Methods
6380 Women, Nature, Science and Technology
6390 Sociology of Culture
6610 Socialization
6620 Current Topics in Social Behaviour
6880 Sociology Graduate Seminar
6900 Master's Research Paper (6 credit hours)

### 8.22 Humanities and Social Sciences Diplomas

The Faculty of Humanities and Social Sciences offers two types of graduate diplomas: disciplinary and interdisciplinary. Disciplinary graduate diplomas provide an opportunity to acquire additional academic credentials at the graduate level within a humanities or social science discipline. Interdisciplinary graduate diplomas provide opportunities to acquire additional academic credentials at the graduate level in emerging interdisciplinary research areas in the humanities and social sciences.

1. A graduate diploma mây be offered in the disciplines of Anthropology, Classics, Economics, English, Folklore, French, Gender Studies, German, History, Linguistics, Philosophy, Political Science, Religious Studies, or Sociology.
2. Interdisciplinary graduate diplomas may also be offered, depending on time, resources, and opportunity.

### 8.22.1 Qualifications for Admission

To be considered for admission to the graduate diploma program, an applicant shall meet the minimum requirements set out in the General Regulations of the School of Graduate Studies governing Graduate Diploma Programs, the Regulations Governing the Degree of Master of Arts or Regulations Governing the Degree of Master of Gender Studies; and, where applicable, the particular regulations of the appropriate departments or disciplines. Applicants for admission to a graduate diploma in Anthropology, Classics, Economics, English, Folklore, French, Gender Studies, German, History, Linguistics, Philosophy, Political Science, Religious Studies, or Sociology must apply through the corresponding department or discipline, working with the department's or discipline's Graduate Officer.

### 8.22.2 Program Requirements

Graduate diplomas in the Faculty of Humanities and Social Sciences conform to the School of Graduate Studies General Regulations, Program Requirements, Graduate Diploma and Master's Programs and require successful completion of 9-12 eligible credit hours in graduate courses.

1. Every student for a graduate diploma in the disciplines of Anthropology, Classics, Economics, English, Folklore, French, Gender Studies, German, History, Linguistics, Philosophy, Political Science, Religious Studies, or Sociology is required to complete the
majority of all graduate courses in the relevant department or discipline. The number of credit hours (9-12) for the graduate diploma are at the discretion of the relevant department or discipline.
2. A student admitted to a graduate diploma in the disciplines of Anthropology, Classics, Economics, English, Folklore, French, Gender Studies, German, History, Linguistics, Philosophy, Political Science, Religious Studies, or Sociology, who has demonstrated to the satisfaction of the appropriate department or discipline an ability to pursue research at the master's level, may, at the discretion of the department or discipline, be permitted subsequently to transfer a student's candidature to that of a master's in the affiliated program area. For credits to transfer between a graduate diploma and a master's degree, the two degrees have to share the same credentials. In this event, students will be awarded only one of a master's or graduate diploma in the same department or discipline.

### 8.22.3 Graduate Courses

Most courses offered for a master's program are eligible for a graduate diploma program in the same discipline. However, courses designed for a master's essay or major project cannot be used towards a graduate diploma.
The graduate courses counting towards a graduate diploma in Anthropology, Classics, Economics, English, Folklore, French, Gender Studies, German, History, Linguistics, Philosophy, Political Science, Religious Studies, or Sociology are at the discretion of the relevant department or discipline. Courses for these graduate diplomas are normally a subset of the courses required for the relevant department's or discipline's master's program, with one of the courses normally being a foundational course in the discipline. Prospective students should contact a Graduate Officer for specific details.
Courses in interdisciplinary graduate diploma programs are drawn from appropriate, thematically-related Faculty of Humanities and Social Sciences departments or disciplines.

## 9 Regulations Governing the Degree of Master of Arts and Education (Education and Francophone Literatures and Cultures)

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss www.mun.ca/educ/programs/graduate
The degree of Master of Arts and Education (Education and Francophone Literatures and Cultures) is jointly offered by the Faculty of Humanities and Social Sciences and the Faculty of Education, and is offered by full-time or part-time study
These regulations should be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.
The Administrative Committee is responsible for the program. The Committee shall be comprised of the Associate Dean, Graduate Programs in the Faculty of Education (or delegate), the Head of the Department of Modern Languages, Literatures and Cultures (or delegate) and one appointed faculty member. The faculty member shall come from either the Faculty of Education or the Department of Modern Languages, Literatures and Cultures in alternating years. The Administrative Committee is responsible for admissions and advising students on course selection when appropriate.

### 9.1 Qualifications for Admission

To be considered for admission to the Master of Arts and Education (Education and Francophone Literatures and Cultures), an applicant shall normally hold a Bachelor of Education degree, with a concentration in French, from an institution recognized by Senate. Applicants should have a minimum 'B' standing or an average of $70 \%$ in the last 30 courses attempted and two years of experience teaching French. An appropriate level of proficiency in French is required, and the applicant's level of competence will be evaluated by the Administrative Committee.

### 9.2 Program of Study

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1. Students for the Master of Arts and Education (Education and Francophone Literatures and Cultures) may choose one of two program options:

- Option I. Project Route
- Option II. Comprehensive Course Route

2. All students shall be required to complete:

- French 6800 Littêratures francophones: Théorie et pratique/Francophone literatures: Theory and practice
- French 6810 Cultures francophones: Théorie et pratique/Francophone Cultures: Theory and practice
- Education 6100 Research Designs and Methods in Education
- Six credit hours from Memorial University of Newfoundland, Department of Modern Languages, Literatures and Cultures graduate course offerings as deemed appropriate by the Administrative Committee.
- Nine credit hours selected from:

Education 6668 Current Issues in Second Language Education
Education 6669 Graduate Seminar in Second Language Teaching and Learning Education 6673 Second Language Teaching, Learning and Curriculum
Education 6674 Research in Second Language
Three credit hours from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate by the Administrative Committee.
3. Students choosing Option I must also complete:

- Education 6392 Project in Curriculum, Teaching and Learning Studies

4. Students choosing Option II must also complete:

- Three credit hours from Memorial University of Newfoundland, Department of Modern Languages, Literatures and Cultures graduate course offerings as deemed appropriate for each student's program by the Administrative Committee.
- Education 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies


### 9.3 Evaluation

1. In order to continue as a student for the degree of Master of Arts and Education (Education and Francophone Literatures and Cultures), a student shall obtain an A or B grade in each required course. A student who receives a grade of C in any required course must repeat that course and obtain a minimum grade of $B$. In the case of an elective course, a suitable replacement course acceptable to the Administrative Committee may be substituted for the failed course. Only one such repetition/replacement shall be permitted on the student's graduate program. Should a grade of less than B be obtained in the repeated/replacement course, or any other program course, the student shall be required to withdraw from the program.
2. When the Administrative Committee has determined, through consultation with the student, graduate course instructors, and the project supervisor, if applicable, that the student's work has fallen below satisfactory level, they may request the Dean of the Faculty of Education and the Head of the Department of Modern Languages, Literatures and Cultures recommend to the Dean of Graduate Studies that the student's program be terminated.

### 9.4 Courses

Course descriptions are available at www.mun.ca/educ/programs/graduate/master/Course_Descriptions.pdf.
French 6800 Littératures francophones: Théorie et pratique/Francophone literatures: Theory and practice
French 6810 Cultures francophones: Théorie et pratique/Francophone Cultures: Theory and practice
French 6820 Littérature de jeunesse: Théorie et pratique/Children's and Young Adult Literature: Theory and Practice
Education 6100 Research Designs and Methods in Education
Education 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
Education 6392 Project in Curriculum, Teaching and Learning Studies ( 6 credit hours)
Education 6668 Current Issues in Second Language Education
Education 6669 Graduate Seminar in Second Language Teaching and Learning
Education 6673 Second Language Teaching, Learning and Curriculum (credit may not be obtained for both Education 6673 and the former 6665 or 6667)
Education 6674 Research in Second Language
Other courses offered for the Master of Education program and the Master of Arts in French Studies program as deemed appropriate by the Administrative Committee.
Règlements de la Maîtrise ès Arts et Éducation (Enseignement des littératures et cultures francophones)
www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/educ/programs/graduate/
La Maîtrise ès Arts et Éducation (Enseignement des littératures et cultures francophones) est offerfe conjointement par la Faculté des Arts et la Faculté d'Éducation et cautionne des études à temps partiel ou à temps plein.
Il est recommandé de lire ces réglements en conjonction avec les Règlements gênéraux de l'École des Études supérieures.
Le Comité administratif est responsable du programme. Le Comité sera composé du Doyen adjoint aux programmes supérieurs de la Faculté d'Éducation (ou son représentant), le Directeur du Département d'études françaises et hispaniques (ou son représentant), et un autre membre. Ce dernier viendra alternativement (une année sur deux) d'une des deux unités. Le Comité administratif décidera de l'admission et conseillera à l'occasion les étudiants sur leur choix de cours.

## Admission

Pour être admis au programme de Maîtrise ès Arts et Education (Enseignement des littératures et cultures francophones), il faut normalement détenir un Baccalauréat en Éducation, avec concentration en français, provenant d'une institution reconnue par le Sénat. II faut une note moyenne minimale de 'B' ou une moyenne de $70 \%$ dans les trente derniers cours et deux ans d'expérience dans l'enseignement du français. Un niveau adéquat de français est nécessaire et la compétence des candidats (le masculin est utilisé à tire épicène) sera évaluée par le comité d'admission.

## Programme d'études

1. Les candidats à la Maîtrise ès Arts et Éducation (Enseignement des littératures et cultures francophones) choisira l'une ou l'autre des deux options suivantes:

- $1^{\text {re }}$ option Programme menant au projet terminal
- 2 option Programme entièrement composé de cours

2. Tous les candidats devront compléter:

- French 6800 Littératures francophones: Théorie et pratique
- French 6810 Cultures francophones: Théorie et pratique
- Education 6100 Research Designs and Methods in Education
- Six heures crédits de cours de deuxième cycle du Département d'études françaises et hispaniques jugés appropriés par le Comité administratif.
- Neuf heures crédits parmi:

Education 6668 Current Issues in Second Language Education Education 6669 Graduate Seminar in Second Language Teaching and Learning Education 6673 Second Language Teaching, Learning and Curriculum Education 6674 Research in Second Language

- Trois heures crédits de cours de la Faculté d'Éducation jugés appropriés par le Comité administratif.

3. L'étudiant ayant choisi la $1^{\text {re }}$ option devra compléter:

- Education 6392: Project in Curriculum, Teaching and Learning Studies

4. L'étudiant ayant choisi la $2^{\mathrm{e}}$ option devra compléter:

- Trois heures crédits de cours de deuxième cycle du Département d'études françaises et hispaniques jugés appropriés pour le programme de l'étudiant.
- Education 6390 Research and Development in Teaching and Learning Studies

Évaluation

1. Afin de continuer son inscription au programme de Maîtrise ès Arts et Éducation (Enseignement des littératures et cultures
francophones), le candidat doit obtenir un note de A ou B dans chaque cours obligatoire. Le candidat qui reçoit une note de C dans un cours obligatoire doit répéter ce cours et obtenir au moins B. Dans le cas d'un cours facultatif, un cours jugé approprié par le Comité administratif peut être substitué à un cours qui n'a pas été réussi. Une telle répétition ou un tel remplacement ne sera permis qu'une seule fois dans le programme de l'étudiant. Si une note moindre que $B$ est obtenue dans un cours répété ou dans un cours de remplacement, le candidat devra se retirer du programme.
2. Lorsque le Comité administratif aura établi, après avoir consulté le candidat, ses enseignants et son directeur de projet, le cas échéant, que le travail du çandidat n'atteint toujours pas un niveau satisfaisant, il pourra demander au Doyen de la Faculté des Arts et au Doyen de Faculté d'Éducation qu'ils recommandent la disqualification du candidat au Doyen des Études supérieures.

## Cours

French 6800 Littératures francophones: Théorie et pratique
French 6810 Cultures francophones: Théorie et pratique
French 6820 Littérature de jeunesse: Théorie et pratique
Education 6100 Research Designs and Methods in Education
Education 6390 Research and Development Seminar in Teaching and Learning Studies
Education 6392 Project in Curriculum, Teaching and Learning Studiés (6 crédits heures)
Education 6668 Current Issues in Second Language Education
Education 6669 Graduate Seminar in Second Language Education
Education 6673 Second Language Teaching, Learning and Curriculum (les étudiants ne peuvent recevoir de credit et pour Education 6673 et pour Education 6665 ou 6667)
Education 6674 Research in Second Language
Autres cours de cycle supérieur offerts par la Faculté d'Éducation et le Département d'études françaises et hisppaniques jugés appropriés par le Comité administrative.

## 10 Regulations Governing the Degree of Master of Business Administration

www.mun.ca/sgs/contacts/sgscontacts.php www.business.mun.ca
The Degree of Master of Business Administration (M.B.A.) is offered by full-time or part-time study. These regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 10.1 Qualifications for Admission

1. Admission is limited and competitive. To be eligible for consideration for admission to the MBA program, an applicant shall:
a. normally hold at least a Bachelor's Degree, with a minimum 'B' standing, from an institution recognized by Senate;
b. normally have two years of full-time work experience, or equivalent, deemed acceptable to the Faculty of Business Administration; and
c. achieve a satisfactory total score on the Graduate Management Admission Test (GMAT), as well as an appropriate balance of verbal and quantitative GMAT score components. Specific information regarding test centres, dates, registration procedure and deadlines can be obtained by contacting the Graduate Management Admission Council at the GMAT exam website.
2. An applicant who did not complete a Bachelor's degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Intefnet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org.
3. In exceptional cases, an applicant who has not completed a Bachelor's degree, but who meets all other requirements, may be considered for admission. Preference will be given to those who present a high GMAT score, have a minimum of 10 years of fulltime managerial and executive experience, and have completed several years of university studies. The Faculty may also take into account relevant professional credentials. An applicant who does not meet normal admission requirements may be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Graduates of the Graduate Diploma in Business Administration applying to the M.B.A. program must meet all MBA admission requirements outlined above.
5. Notwithstanding the above, in exceptional cases, and only on the strong recommendation of the Faculty of Business Administration, consideration may be given to an applicant who does not qualify for admission consideration in accordance with the entrance requirements outlined above. It is noted that the GMAT requirement is never waived.

### 10.2 Deadlines for Applications

Applications and all supporting documents must be received not later than May 1 from Canadian applicants wishing to enter full-time or part-time studies in the Fall semester. Full-time and international applicants are normally considered for entry in the Fall semester. International applicants must submit complete documentation by February 1. Part-time applicants planning to enter in the Winter (January) or Spring (May) semester must apply prior to October 15 and January 15 respectively. Individuals submitting applications later than the above dates are not assured of consideration for admission to the program in the semester desired; their applications will be processed only if time and resources permit.

### 10.3 Procedure for Admission

1. Applications for admission to the M.B.A. program must be made on the appropriate form to the School of Graduate Studies.
2. The following documents must be submitted in support of the official application form:
a. letters of appraisal from two referees, at least one of whom has had close professional contact with the applicant within the last two years, and at least one of whom is capable of appraising the applicant's academic potential as a graduate student;
b. official transcript from each university or other post-secondary institution previously attended (other than Memorial University of Newfoundland), to be sent directly by its Registrar (or equivalent officer) to the School of Graduate Studies. If not recorded on the transcript, official evidence of completion of undergraduate degree must also be submitted;
c. the official GMAT score report, to be sent directly by the Graduate Management Admission Council. The code number for Memorial University of Newfoundland is LTT-6W-51;
d. the Master of Business Administration Employment Experience Form; and
e. where applicable, an official TOEFL or IELTS score report (or another equivalent test acceptable to the School of Graduate Studies), to be forwarded directly by the educational testing service.
3. Admission shall be by the Dean of the School of Graduate Studies on the recommendation of the Faculty of Business Administration. Upon notification from the Dean of the School of Graduate Studies of acceptance into the M.B.A. program, an applicant must give written notice to the School of Graduate Studies of an intention to register. Such notice must be received by the Office of the Dean within 30 days of notification of acceptance, or three weeks prior to semester registration.

### 10.4 Programs of Study

The program is a 60 credit hour all-course program. This program requires: 36 credit hours as specified in Table 1 plus 24 credit hours selected from Table 2 including a minimum of 3 credit hours in the area of international business chosen from 9005, 9020, 9030, 9033, 9306, 9326 or another approved international course.
Course exemptions may be considered in accordance with Clause 3. below. In the event that course exemptions are granted, the 60 credit hour program requirement will be adjusted accordingly.

1. The Faculty of Business Administration may consider exemptions for up to 10 ( 30 credit hours) introductory M.B.A. courses for those applicants who have completed relevant undergraduate courses in Business, Economics, and Statistics. Undergraduate courses will normally only be considered for exemption purposes if they were completed within seven years of the year in which admission to the M.B.A. program is sought and provided the student achieved a grade of $75 \%$ or higher in the undergraduate course(s) required for exemption of the relevant M.B.A. course. Only the following introductory M.B.A. courses will be considered for exemption: 8103, 8104, 8106, 8108, 8109, 8204, 8205, 8206, 8207, and 8208.
2. An applicant who has completed a Graduate Diploma in Business Administration from the Faculty of Business Administration will have all courses completed as part of the Graduate Diploma in Business Administration count towards the 60 -credit hour M.B.A program.
3. An applicant who has completed relevant undergraduate courses at institutions external to Memorial University of Newfoundland must submit the following information to the M.B.A. Program Office, Faculty of Business Administration, for evaluation:

- a detailed course outline for each course to be considered in the application for advanced standing;
- a description of the method of evaluation used in each such course, the grades received, and the completion dates.

4. The Faculty of Business Administration reserves the right to restrict a student from taking particular M.B.A. elective courses if it is deemed that those courses do not add sufficient value beyond courses that the student has completed at the undergraduate level.
5. A student is required to observe approved co- or prerequisites in scheduling courses. These are indicated in Table 3.
6. A student shall successfully complete the requirements of Business 8103 as part of the first 36 credit hours of the program.

### 10.5 Evaluation

1. Credit towards the M.B.A. Degree will be granted only for those courses which have been approved as constituting part of the student's program of study and in which the student has obtained a mark of $65 \%$ or higher.
2. A student is required to withdraw from the M.B.A. program if a final grade of ' $F$ ' is obtained in any course.
3. To remain in the program, a student who obtains a final grade of ' $C$ ' or ' $D$ ' in any course must repeat that course when next offered, and obtain a minimum grade of' $\mathrm{B}^{\prime}$. In the case of an elective course, a replacement course approved by the Faculty of Business Administration may be substituted for the course. Only two such repetitions/replacements shall be permitted in the student's graduate program. Should a grade of less than 'B' be obtained in a repeated or replacement course, the student shall be required to withdraw from the program.

### 10.6 Courses

Table 1 Master of Business Administration Schedule of Required Courses

| 8103 Statistical Applications in Management | 8204 Human Resource Management |
| :--- | :--- |
| 8104 Organizations: Behaviour and Structure | 8205 Information Systems |
| 8106 Marketing | 8206 Managerial Finance |
| 8107 Managing Ethics and Responsibility | 8207 Operations Management |
| 8108 Economics for Business | 8208 Strategic Management |
| 8109 Accounting for Management | 8209 Leadership and Interpersonal Skills for Managers |

Table 2 Master of Business Administration Schedule of M.B.A. Electives

## 8001 Consumer Behaviour

8002-8005 Special Topics
8202 Advanced Managerial Accounting
8203 Management Science
8210 Labour Relations
9001-9019 Special Topics (excluding 9005, 9013)
9005 International Marketing
9013 Collective Agreement Administration and Arbitration
9020 International Human Resource Management
9021 Data Management
9022 Information Systems Analysis and Design
9023-9050 Special Topics (excluding 9030, 9032, 9033,
9034, 9040)
9030 International and Comparative Industrial Relations
9032 Digital and Social Media Marketing
9033 The International Business Environment
9034 Strategic Risk Management
9040 Business Sustainability
9103 Research in Management
9301-9303 Research Project
9306 Global Strategy

## 9308 New Venture Creation

9309 Marketing Management
9310 Management Science Applications
9311 Seminar in Human Resource Management
9312 Financial Management
9314 Business Law
9315 Advanced Financial Accounting
9316 Information Systems Management
9317 Current Topics in Management
9318 Marketing Communications Management
9320 Investments and Portfolio Management
9322 Strategic Management of Technology and Innovation
9323 Financial Forward, Futures, and Options Markets
9324 Gender, Work and Organizations
9326 International Finance
9328 Change Management
9329 Labour Law
Up to 6 credit hours in courses from other non-business graduate programs within the School of Graduate Studies, as approved by the Dean of Graduate Studies on the recommendation of the Faculty of Business Administration

A selection of electives will be offered to meet the requirements of students as far as the resources of the Faculty of Business Administration will allow.

Table 3 Master of Business Administration Course Prerequisite/Co-requisite

| Course | Prerequisite/Co-requisite* | Course | Prerequisite/Co-requisite* |
| :---: | :---: | :---: | :---: |
| 8001 | 8106 | 9034 | Nine required courses |
| 8103 | Nil | 9040 | Nine required courses including 8107 |
| 8104 | Nil | 9103 | Nine required courses completed including 8103 |
| 8106 | Nil | 9301 | Nine required courses completed |
| 8107 | Nil | 9302 | Nine required courses completed plus 9301* |
| 8108 | Nil | 9303 | Nine required courses completed plus 9301* and 9302* |
| 8109 | Nil | 9306 | Nine required courses completed |
| 8202 | 8109 | 9308 | 8106, 8109 |
| 8203 | Nil | 9309 | Nine required courses completed including 8106 |
| 8204 | Nil | 9310 | $8203$ |
| 8205 | Nil | 9311 | Nine required courses completed including 8104, 8204 or admission to the MER program |
| 8206 | 8103*, 8108*, 8109 | 9312 | Nine required courses completed including 8103, 8108, 8109, 8206 |
| 8207 | 8103, 8108* | $9314$ | Nine required courses completed including 8103, 8108, 8109,8206 or admission to the MER program |
| 8208 | 8103, 8104, 8106, 8108, 8109, 8205*, 8206*, 8207* | 9315 | 8109 |
| 8209 | 8104 | 9316 | Nine required courses completed including 8205 |
| 8210 | Nil | 9317 | Nine required courses completed |
| 9005 | Nine required courses including 8106 | 9318 | Nine required courses completed including 8106 |
| 9013 | Nine required courses completed including 8210 or 8210 plus admission to the MER program | $9320$ | Nine required courses completed including 8103, 8108, 8109, 8206 |
| 9020 | Nine required courses completed including 8104 or 8204 or 8204 | 9322 | 8104, 8106, 8108, 8109, 8206 |
| 9021 | Nine required courses completed including 8205 | $9323$ | Nine required courses completed including 8103, 8108, 8109, 8206, 9320 |
| 9022 | Nine required courses completed including 8205 | $9324$ | Nine required courses completed including 8104 or admission to the MER program |
| 9030 | Nine required courses completed including 8210 or 8210 | 9326 | Nine required courses completed including 8103, 8108, 8109, 8206 |
| 9032 | $8106$ | 9328 | Nine required courses completed including 8104 or admission to the MER program |
| 9033 | Nine required courses | 9329 | Nine required courses completed including 8210 or 8210 plus admission to the MER program |

Note: Unless specified in Table 3 all 9000-level courses require the prior completion of nine required courses, including any specific prerequisites or corequisites unless otherwise specified

### 10.7 Graduate Diploma in Business Administration

The Faculty of Business Administration offers a course-based Graduate Diploma in Business Administration. The program is available on a part-time basis only.

### 10.7.1 Qualifications, Deadlines, and Procedures for Admission

1. 2. Admission is limited and competitive. To be eligible for consideration for admission to the Graduate Diplomas in Business Administration an applicant shall:
a. normally hold at least a Bachelor's Degree, with a minimum GPA of 3.0, from an institution recognized by Senate; and
b. normally have five years of full-time work experience, or equivalent, deemed acceptable to the Faculty of Business Administration;
1. An applicant who did not complete a Bachelor's degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. international English Language Testing System (IELTS) and achieve a score of 7 (or higher).
2. The following documents must be submitted in support of the official application form:
a. letters of appraisal from two referees, at least one of whom has had close professional contact with the applicant within the last two years, and at least one of whom is capable of appraising the applicant's academic potential as a graduate student;
b. official transcript from each university or other post-secondary institution previously attended (other than Memorial University of Newfoundland), to be sent directly by its Registrar (or equivalent officer) to the School of Graduate Studies. If not recorded on the transcript, official evidence of completion of undergraduate degree must also be submitted;
c. the Graduate Diploma in Business Administration Employment Experience Form; and
d. where applicable, an official TOEFL or IELTS score report to be forwarded directly by the educational testing service.
3. Applications and all supporting documents must be received not later than May 1 for the Fall semester, October 15 for the Winter semester, and January 15 for the Spring semester.

### 10.7.2 Program of Study

1. The Graduate Diploma in Business Administration program requires the completion of 15 credit hours consisting of 9 credit hours in core courses and 6 credit hours in elective courses.
2. Core courses must include:

BUSI 8104 Organizations: Behaviour and Structure
BUSI 8106 Marketing
BUSI 8109 Accounting for Management
3. Elective courses can include:

BUSI 8103 Statistical Applications in Management
BUSI 8108 Economics for Business
BUSI 8204 Human Resource Management
BUSI 8205 Information Systems
BUSI 8210 Labour Relations
Other electives may be approved by the Faculty of Business Administration

### 10.7.3 Evaluation

1. Credit towards the Graduate Diploma in Business Administration will be granted only for those courses which have been approved as constituting part of the student's program of study and in which the student has obtained a mark of $65 \%$ or higher.
2. A student is required to withdraw from the Graduate Diploma in Business Administration if a final grade of 'F' is obtained in any course.
3. To remain in the program, a student who obtains a final grade of 'C' or ' D ' in any course must repeat that course when next offered, and obtain a minimum grade of' B'. In the case of an elective course, a replacement course approved by the Faculty of Business Administration may be substituted for the course. Only one such repetition/replacement shall be permitted in the student's program. Should a grade of less than 'B' be obtained in a repeated or replacement course, the student shall be required to withdraw from the Graduate Diploma in Business Administration program.

## 11 Regulations Governing the Degree of Master of Business Administration in Social Enterprise and Entrepreneurship

www.mun.ca/sgs/contacts/sgscontacts.php
www.business.mun.ca
The Degree of Master of Business Administration in Social Enterprise and Entrepreneurship (MBA-SEE) is offered by full-time study only. These regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 11.1 Qualifications for Admission

1. Admission is limited and competitive. To be eligible for consideration for admission to the Master of Business Administration program, an applicant shall:
a. normally hold at least a Bachelor's Degree, with a minimum 'B' standing, from an institution recognized by Senate;
b. normally have two years of full-time work experience, or equivalent, deemed acceptable to the Faculty of Business Administration; and
c. achieve a satisfactory total score on the Graduate Management Admission Test (GMAT), as well as an appropriate balance of verbal and quantitative GMAT score components or a satisfactory total score on the Graduate Record Examinations (GRE) General Test, as well as an appropriate balance of verbal and quantitative GRE score components. Specific information regarding GMAT test centres, dates, registration procedure and deadlines can be obtained by contacting the Graduate Management Admission Council at the GMAT exam website. Specific information regarding GRE test centres, dates, registration procedure and deadlines can be obtained at www.ets.org.
2. An applicant who did not complete a Bachelor's degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org.
3. In exceptional cases, an applicant who has not completed a Bachelor's degree, but who meets all other requirements, may be considered for admission. Preference will be given to those who present a high GMAT score, have a minimum of 10 years of fulltime managerial and executive experience, and have completed several years of university studies. The Faculty may also take into account relevant professional credentials. An applicant who does not meet normal admission requirements may be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Notwithstanding the above, in exceptional cases, and only on the strong recommendation of the Faculty of Business Administration, consideration may be given to an applicant who does not qualify for admission consideration in accordance with the entrance requirements outlined above. It is noted that the GMAT requirement is never waived.

### 11.2 Deadlines for Applications

Applications and all supporting documents must be received no later than February 1 from applicants wishing to enter full-time studies in the Fall semester.

### 11.3 Procedure for Admission

1. Applications for admission to the MBA-SEE program must be made on the appropriate form to the School of Graduate Studies.
2. The following documents must be submitted in support of the official application form:
a. letters of appraisal from two referees, at least one of whom has had close professional contact with the applicant within the last two years, and at least one of whom is capable of appraising the applicant's academic potential as a graduate student;
b. official transcript from each university or other post-secondary institution previously attended (other than Memorial University of Newfoundland), to be sent directly by its Registrar (or equivalent officer) to the School of Graduate Studies. If not recorded on the transcript, official evidence of completion of undergraduate degree must also be submitted;
c. the official GMAT score report, to be sent directly by the Graduate Management Admission Council. The code number for Memorial University of Newfoundland is LTT-6W-51;
d. the Faculty of Business Administration's Employment/Volunteer Experience Form;
e. the Faculty of Business Administration's Social Enterprise Questionnaire; and
f. where applicable, an official TOEFL or IELTS score report to be forwarded directly by the educational testing service.
3. Admission shall be by the Dean of the School of Graduate Studies on the recommendation of the Faculty of Business Administration. Upon notification from the Dean of the School of Graduate Studies of acceptance into the MBA-SEE program, an applicant must give written notice to the School of Graduate Studies of the intention to register. Such notice must be received by the Office of the Dean within 30 days of notification of acceptance, or three weeks prior to semester registration.

### 11.4 Programs of Study

This program requires 36 credit-hours as specified below:

### 11.4.1 Fall Semester ( 15 credit-hours)

- Business 8500 Introductions to Social Innovation, Social Enterprise and Social Entrepreneurship (3 credit-hoûrs)
- Business 8501 The Rise of Sustainable Capitalism (3 credit-hours)
- Business 8502 Organizational Behaviour in Social Enterprise (2 credit-hours)
- Business 8503 Managing Social Enterprise: Marketing (2 credit-hours)
- Business 8504 Managing Social Enterprise: Accounting (2 credit-hours)
- Business 8505 Managing Social Enterprise: Human Resources (2 credit-hours)
- Business 8506 Managing Social Enterprise: Information Systems (2 credit-hours)


### 11.4.2 Winter Semester ( 15 credit-hours)

- Business 8507 Managing Social Enterprise: Finance (2 credit-hours)
- Business 8508 Managing Social Enterprise: Operations Management (2 credit-hours)
- Business 8509 Leadership within Social Enterprises (2 credit-hours)
- Business 8510 Economics and Public Policy (2 credit-hours)
- Business 8511 Strategic Business Planning for a Social Venture (2 credit-hours)
- Business 8512 Funding Social Ventûres (2 credit-hours)
- Business 8513 Project Managêment (1 credit-hour)
- Business 8514 Legal and Regulatory Issues (1 credit-hour)
- Business 8515 Governing Social Enterprises (1 credit-hour)
- Business 8516 Social Impact Measurement ( 1 credit-hour)


### 11.4.3 Spring/Summer ( 6 credit-hours)

- Business 8517 Internship (3 credit-hours)
- Business 8518 Reflections (1 credit-hour)


### 11.5 Evaluation

1. Credit towards the MBA-SEE Degree will be granted only for those courses which have been approved as constituting part of the student's program of study and in which the student has obtained a mark of $65 \%$ or higher.
2. A student is required to withdraw from the MBA-SEE program if a final grade of ' $C$ ' is obtained in any course.

## 12 Regulations Governing the Degree of Master of Education

[^31]Education, and Faculty refers to the Faculty of Education, through its various operating committees.
Students taking any of the Master of Education Degree programs are advised that a Bachelor of Education Degree is required for employment in the K-12 system.

### 12.1 Qualifications for Admission

1. Admission to the Master of Education is limited and competitive. To be considered for admission to a graduate program in Education, an applicant shall:
a. have from a recognized institution, either (1) an undergraduate degree with at least second class standing, or (2) an undergraduate degree and an average of at least $70 \%$ in the last 90 attempted undergraduate credit hours.
b. meet the requirements set forth in the specific program regulations.
2. Only in exceptional circumstances, and only on the recommendation of the Dean of Education, shall the Dean consider applicants who do not meet the requirements in 1.
3. Please refer to Specific Programs regulations for additional admission requirements.

### 12.2 Program of Study

1. Students for the Master of Education (Educational Leadership Studies, Curriculum, Teaching and Learning Studies) shall be required to complete a minimum of:
a. 18 credit hours plus a thesis; or
b. 24 credit hours plus an internship report, a project report or a paper folio; or
c. 30 credit hours on the comprehensive-course route.

Students for the Master of Education (Post-Secondary Studies) shall be required to complete a minimum of
a. 18 credit hours plus a thesis; or
b. 24 credit hours plus an internship; or
c. 30 credit hours on the comprehensive-course route.

Students for the Master of Education (Counselling Psychology) shall be required to complete a minimum of:
a. 30 credit hours (which include an internship) plus a thesis; or
b. 36 credit hours (which include an internship) on the comprehensive-course route.

Students for the Master of Education (Information Technology) shall be required to complete a minimum of:
a. 18 credit hours plus a thesis; or
b. 30 credit hours on the comprehensive-course route.

Students for the Graduate Diploma in Post-Secondary Studies (Health Professional Education) must complete:
a. 12 credit hours

Students for the Graduate Diploma in Educational Leadership Studies must complete:
a. 18 credit hours
2. Students may apply for transfer of course credits. All course transfers require the approval of the Dean, on the recommendation of the Dean of Education, and are subject to General Regulation, Program Requirements, Transfer of Course Credits of the School of Graduate Studies.
3. a. All graduate courses completed must be in accordance with the student's program of study.
b. Graduate courses not within a program of study must be approved by the Associate Dean, Graduate Programs and Research, Faculty of Education, prior to registration.
4. a. A student with full-time status mây register for a maximum of 12 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.
b. A student with part-time status may register for a maximum of 3 credit hours in any semester or session, excluding summer session, when 6 credit hours are permitted.
c. Students may register for additional courses in a semester or session with the permission of the Office of the Associate Dean of Graduate Programs in Education.
5. Before submission of the proposal for thesis, project, internship, or paper folio, a Supervisory Committee shall be recommended by the Dean of Education, in consultation with the student, and approved by the Dean. The Supervisory Committee shall consist of the Supervisor and at least one other member.
The function of the Supervisory Committee shall be to approve the proposal for the thesis, project, internship, or paper folio, and to exercise supervision in the conduct of the study on behalf of the Faculty, subject to the final approval of the Dean.

### 12.3 Period of Study

The period of the study for a graduate program shall not normally exceed six years beyond first registration. Completion of some program components may require full-time study on the University campus.

### 12.4 Evaluation

1. In order to continue as a student for the Master of Education Degree, a student who receives a final grade of ' C ' in any program course must repeat that course and obtain a minimum grade of ' $B$ '. In the case of an elective course a suitable replacement course, acceptable to the Faculty, may be substituted for the failed course. Only one such repetition/replacement shall be permitted on the student's graduate program. Should a grade of less than 'B' be obtained in the repeated course, replacement course, or any other program course, the student shall be required to withdraw from the program.
2. When the Faculty has determined, through consultation with the student, the instructors of graduate courses, and the program advisor or thesis Supervisor that the student's work has fallen below satisfactory level, it may request that the Dean of Education recommend to the Dean that the student's program be terminated.

### 12.5 Thesis

See School of Graduate Studies General Regulation, Theses and Reports.

### 12.6 Program Regulations

Every student in graduate studies shall comply with the School of Graduate Studies General Regulations, the Degree Regulations Program of Study, and the specific program regulations as outlined in Specific Programs.

### 12.7 Appeals and Waivers Procedures

Students are advised that appeals and waivers of any regulations governing the Degree of Master of Education are governed by School of Graduate Studies General Regulations Provision For Waiver of Regulations and Appeal Procedures.

### 12.8 Specific Programs

### 12.8.1 Educational Leadership Studies

The Educational Leadership Studies program provides students with an opportunity to explore a broad range of issues in educational leadership, policy, and administration. It prepares students to assume leadership roles in a variety of settings, including school and district leadership, post-secondary institutions and policy analysis. The Faculty offers a Master of Education degree and a Graduate Diploma in Educational Leadership Studies.

### 12.8.1.1 Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations,

1. students must have completed a range and number of courses in Education deemed appropriate by the Faculty and Dean of Education.
2. a minimum of two years of teaching/leadership experience is recommended.

### 12.8.1.2 Program Requirements

1. all students in the Master of Education Program (Educational Leadership Studies) program must complete

- 6100 Research Designs and Methods in Education
- 6204 Educational Administration: Theory and Practice
- 6205 Educational Policy: Theory and Practice and one of the following:
- 6 credit hours (thesis route) within closed electives as listed in 5. below or
- 9 credit hours (internship, paper folio, project, comprehensive course route) within closed electives as listed in Closed electives below

2. students on the thesis route must complete at least one of the research courses listed below ( 6100 is prerequisite)

- 6466 Qualitative Research Methods
- 6467 Quantitative Research Methods
- 6468 Critical Approaches to Educational Research
- 6469 Theoretical and Methodological Foundations of Action Research

3. students on the comprehensive-course route must complete 6290 Research and Development Seminar in Educational Leadership Studies. Normally students would be permitted to register for this course only after all other course requirements have been met, or during the student's last semester of stúdies.
4. to meet total credit hour requirements students may choose electives from any university graduate offering provided that those chosen are appropriate to the student's program:

- students on the thesis route must complete a total of at least 18 credit hours
- students on the internship, paper folio, or project route must complete a total of at least 24 credit hours and the appropriate course option including 6291 Internship in Educational Leadership Studies ( 6 credit hours), 6292 Project in Educational Leadership Studies ( 6 credit hours), or 6293 Paper Folio in Educational Leadership Studies ( 6 credit hours)
- students on the comprehensive-course route must complete a total of at least 30 credit hours

5. Closed electives are those listed below:

6202 Social Context of Educational Leadership
6203 Leadership: Theory and Practice
6321 Supervisory Processes in Education
6330 Educational Finance
6335 Legal Foundations of Educational Administration
6410 Seminar on Philosophical Issues in Educational Policy and Leadership
6420 Ethical Issues and Perspectives in Educational Practice and Policy
6425 Comparative Perspectives in Public Education, Reform, and Leadership
6426 Computer Applications in Educational Administration
6427 School Community Partnerships
6440 Family-School Relations: Leadership and Policy Implications
6465 School Violence: Leadership and Policy Implications
6664 Seminar in School Improvement
6710 Issues in Development and Implementation of Special Education Policy and Practices
Courses must be appropriate to the program and chosen in consultation with the advisor.

### 12.8.2 Graduate Diploma in Education (Educational Leadership Studies)

The Graduate Diploma in Education (Educational Leadership Studies) provides students with an opportunity to explore a broad range of issues in educational leadership, administration, foundations and policy. The Diploma is suitable for students interested in pursuing assume leadership roles in a variety of settings, including schools, school districts and post-secondary institutions. The program is also
designed to enhance leadership competencies in relevant areas such as policy analysis, critical analysis, and community relations.

### 12.8.2.1 Admission Requirements

Students wishing to be admitted to the Graduate Diploma in Education (Educational Leadership Studies) must meet the criteria for admission specified under Master of Education (Educational Leadership Studies) degree, Qualifications for Admission.

### 12.8.2.2 Program Requirements

Students for the Graduate Diploma must complete a total of 12 credit hours, including 3 credit hours from each of the following areas:
Educational Administration
6204 Educational Administration: Theory and Practice
6330 Educational Finance
6335 Legal Foundations of Educational Administration
6426 Computer Applications in Educational Administration

## Educational Foundations

6202 Social Context of Educational Leadership
6410 Seminar on Philosophical Issues in Educational Policy and Leadership
6420 Ethical Issues and Perspectives in Educational Practice and Policy
6664 Comparative Perspectives in Public Education, Reform and Leadership

## Educational Leadership

6203 Leadership: Theory and Practice
6321 Supervisory Processes in Education
6427 School Community Partnerships
6664 Seminar in School Improvement
Educational Policy
6205 Educational Policy: Theory and Practice
6440 Family-School Relations: Leadership and Policy Implications
6465 School Violence: Leadership and Policy Implications
6710 Issues in Development and Implementation of Special Education Policy and Practices
Students enrolled in the Graduate Diploma program may request transfer to the Master of Education (Educational Leadership Studies) prior to graduation.
Students holding the Graduate Diploma in Education (Educational Leadership Studies) and accepted to the M.Ed. (Educational Leadership Studies) program will complete up to 12 fewer credit hours dependent upon the chosen program route and the completion date of the Diploma.
All courses completed must satisfy the requirements for the Graduate Diploma (Educational Leadership Studies) and the Master of Education (Educational Leadership Studies) Degree

### 12.8.3 Curriculum, Teaching and Learning Studies

The Master of Education in Curriculum, Teaching and Learning Studies provides opportunities for students to investigate pertinent issues in these interrelated areas from a variety of perspectives: philosophical, historical, social, cultural, cognitive, and technological. The conceptual bases of curriculum, teaching, and learning are explored and analysed along with related examples of historical and current policies and practices. The program encourages the development of broad-based insights into issues related to these areas through an emphasis on critical inquiry and reflective practice. It supports students in the development and enhancement of research capabilities and professional expertise and practice.
Students may choose between two program options in Curriculum, Teaching and Learning Studies:

## Option One

Students may choose to specialize in one of a number of areas of study: Indigenous and Place-based Education, Language and Literacy Studies, Mathematics Education, Music Education, Science Education, Second Language Education, Social Justice Education, Social Studies Education, Special Education, and Teacher-Librarianship.

## Option Two

In consultation with a faculty advisor, students may choose to design a program speciality which addresses their research interests. Specialty foci within Curriculum, Teaching, and Learning Studies are numerous and may include technology and web-based education, arts education, rural and multi-age education. Students may alternatively select appropriate courses from other Master of Education program offerings to develop a program to meet their learning goals. Students interested in this option are strongly encouraged to explore and to focus their research and study interests and to discuss these interests with a faculty advisor.

### 12.8.3.1 Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations,

1. students must have completed a range and number of courses in Education deemed appropriate by the Faculty and Dean of Education.
2. a minimum of two years of teaching or related experience is recommended.
3. for a specialization in special education, a completed Bachelor of Special Education Degree or equivalent is required and enrolment will be limited to applicants articulating a research focus for which appropriate thesis supervision is available.

### 12.8.3.2 Program Requirements

1. all students in the Master of Education Program (Curriculum, Teaching and Learning Studies) shall be required to complete:

- 6100 Research Designs and Methods in Education
- 6300 Teaching and Learning
- 6602 Curriculum Studies

2. students on the thesis route must complete at least one of the research courses listed below ( 6100 is prerequisite):

- 6466 Qualitative Research Methods
- 6467 Quantitative Research Methods
- 6468 Critical Approaches to Educational Research
- 6469 Theoretical and Methodological Foundations of Action Research
- 6909 Narrative Approaches to Teaching, Learning and Research
- and at least 2 courses from any university graduate offering provided that those chosen are appropriate to the student's program

3. students choosing Option One on the internship, paper folio, project route, and comprehensive-course route must complete at least 2 courses within one particular specialty area from the list in Core speciality courses in the study of curriculum, teaching and learning areas below.
4. students choosing Option Two must choose courses that have been designated through consultation with faculty advisor during the first semester of studies in this program.
5. students choosing the Mathematics Education specialization within Curriculum, Teaching and Learning Studies must complete 6630 Critical Issues in Mathematics Education prior to completing other Mathematics Education specialty courses.
6. students choosing the Special Education specialization within Curriculum, Teaching and Learning Studies must complete a thesis and at least two of the required Special Education speciality courses.
7. students on the comprehensive-course route must complete one of the following courses: E6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies or E6394 Biographical Explorations of Teaching and Learning or E6913 Putting Action Research Methodologies into Practice (prereq. E6469). Normally students would be permitted to register for one of these courses only after all other course requirements have been met, or during the student's last semester of studies.
8. to meet total credit hour requirements students may choose electives from any university graduate offering provided that those chosen are appropriate to the student's program:

- students on the thesis route must complete a total of at least 18 credit hours
- students on the internship, paper folio, or project route must complete a total of at least 24 credit hours and the appropriate course option 6391 Internship in Curriculum, Teaching and Learning Studies ( 6 credit hours), 6392 Project in Curriculum, Teaching and Learning Studies ( 6 credit hours), or 6393 Paper Folio in Curriculum, Teaching and Learning Studies ( 6 credit hours)
- students on the comprehensive-course route must complete a total of at least 30 credit hours

9. Core speciality courses in the study of curriculum, teaching and learning areas:

Indigenous and Place-based Education
6394 Biographical Explorations of Teaching and Learning
6462 Cultural, Landscapes, Knowledge and Pedagogy
6603 Place, Ecology, and Education
6923 Perspectives in Indigenous Education
6924 Decolonizing Pedagogies
Language and Literacy Studies
6106 Popular Culture and Literacy Education
6108 Literacy and Language Education: Sociocultural Perspectives
6641 Writing in the Primary, Elementary and Secondary Schools
6642 Developmental Reading (K-8)
6643 Contemporary Issues in Intermediate and Secondary English
6645 Literature for Children and Adolescents
6647 Diagnosis and Remediation of Reading and Writing Difficulties
6649 Exploring Multiple Literacies
6693 Literacy for the Young Child in Home and School

## Mathematics Education

6630 Critical Issues in Mathematics Education
6634 Teaching and Learning to Solve Mathematics Problems (prerequisite E6630)
6639 Technology and the Teaching and Learning of Mathematics (prerequisite E6630)

## Music Education

6502 Contexts of Music Education
6503 Teaching Music from the Podium
6504 Musicianship, Pedagogy, and Learning

## Science Education

6653 Contemporary Issues in Science Education I
6655 The Nature of Science and Science Education
6658 Teaching and Learning Scientific Concepts, Laws, and Theories
Second Language Education
6668 Current Issues in Second Language Education
6669 Graduate Seminar in Second Language Teaching and Learning
6673 Second Language Teaching, Learning and Curriculum
6674 Research in Second Language Writing Education
6676 Research and Practice in TESL/TEFL (Teaching English as a Second/Foreign Language)
Social Justice Education
6105 Social and Cultural Difference and Education
6106 Popular Culture and Literacy Education
6108 Literacy and Language Education: Sociocultural Perspectives
6440 Family School Relations: Leadership and Policy Implications
6463 Relationships First: Rethinking Educational Engagement (credit may be obtained for only one of 6463 or 6936)
6465 School Violence: Leadership and Policy Implications
6468 Critical Approaches to Educational Research
6909 Narrative Approaches to Teaching, Learning and Research
6913 Putting Action Research Methodologies into Practice (prerequisite: 6469 Theoretical and Methodological Foundations of Action Research)

## Social Studies Education

6670 Teaching and Learning Social Studies
6671 Research in Social Studies Education

6672 Issues and Trends in Social Studies
Special Education
6710 Issues in Development and Implementation of Special Education Policy and Practices
6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
6714 Principles and Practices in Exceptionality
6755 Nature and Assessment of Learning Disabilities

## Teacher-Librarianship

6662 Seminar in Teacher-Librarianship
6664 Seminar on School Improvement
Additional courses in the speciality areas are available.

### 12.8.4 Counselling Psychology

The mission of the program in Counselling Psychology is to prepare highly knowledgeable, skilled, dedicated, and ethical professional practitioners, who will endeavour to enhance human potential throughout the life span and who can effectively practice within a variety of settings.
The Counselling Psychology faculty promotes counselling as an effective, viable means of assisting individuals throughout the life span. The counselling practitioner, regardless of the practitioner's theoretical stance or work setting, functions as a change agent who is sensitive to and knowledgeable about the range of human development reflected in individual differences and cultural and linguistic diversity. Effective and positive change is brought about by assisting clients to: examine and modify their behaviour for more effective living; cope with, adjust to, or otherwise negotiate the environments affecting their psychosocial well-being; and effect change in the larger society.
The practice of Counselling Psychology is based on theory and research, an understanding of ethical practices, and a set of professional and interpersonal skills. It is essential that graduate students study a variety of conceptual frameworks and research findings as preparation for collaborative work with other helping professionals, paraprofessionals, and a variety of self-help groups.
The Counselling Psychology faculty, while representing a range of views, agree that the uniqueness of the individual and the individual's personal strengths must be acknowledged and respected. To fully explore professional issues and personal values, a trusting and open atmosphere must be present.
Individuals from a wide variety of personal, social, and educational backgrounds are encouraged to apply to the Counselling Psychology program. The program provides a broad-based sequence of studies and supervised experiences that will prepare graduate students to be knowledgeable and skilled practitioners who can function in a variety of settings. By the time they have completed this program, students will have acquired knowledge and competencies in the following general areas. individual and group counselling theory and techniques, legal and ethical aspects of counselling, human development and learning, social, cultural, and linguistic diversity, career education and counselling, program development and implementation, measurement and appraisal, research and program evaluation, and application of current technology service delivery in rural areas.

### 12.8.4.1 Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations, students:

1. must have completed Education 3210, Introduction to Counselling,
2. must have completed at least one undergraduate course on each of the following topics: Statistics (Education 2900), Assessment (Education 3280, 3951, 3952 or 4950), Introduction to Career Education (Education 3211), Introduction to Exceptionality (Education 4240 or 4242). Please note that many of these courses are prerequisites to specific graduate courses and must be completed before taking those courses.
3. must have at least one year of teaching (or related work) experience.
4. must submit a resume that contains a concise rationale for the application ( 500 words or less) and three letters of recommendation (preferably one from each of the following: previous university instructors, supervisors, or employers).
5. should note admission is selective and controlled by an admission committee of faculty members involved in the program. An interview may be required if deemed necessary.
6. should note the Graduate Record Examination may be required.
7. A criminal record check or other screening procedures are not required as a condition of admission to the Counselling Psychology program. A student should, however, be aware that such record checks or other screening procedures are required by school districts, schools, community agencies, or other agencies that host counselling psychology students. Such agencies will not accept a student without a clean criminal record and vulnerable sector check or other screening procedures, which would prevent the student from completing a required component of the program. As a result, such a student may not be eligible for promotion or graduation.
It is the responsibility of the student to have such procedures completed as required and at the student's own expense. The Faculty of Education's Counselling Psychology program expects a student to provide evidence of a clean criminal record and vulnerable sector check before participating in any course or experience where direct contact with clients will occur.
The screening procedures of any given agency may change from time to time and are beyond the control of the University.

### 12.8.4.2 Program Requirements

1. all students in the Master of Education (Counselling Psychology) program shall be required to complete:

6100 Research Designs and Methods in Education (prerequisite: Education 2900)
6702 Counselling: Theory and Practice (prerequisite: Education 3210)
6706 Career Education and Career Counselling (prerequisite: Education 3211)
6708 Group Counselling: Theory and Practice (prerequisite: Education 6702)
6700 Ethical and Legal Issues in Counselling
6720 Internship in Counselling Psychology (prerequisite: Normally completion of all courses) (9 credit hours)
2. Students on the thesis route must complete the core courses listed above ( 24 credit hours) as well as a minimum of 6 credit hours from the closed electives indicated below for a total of 30 credit hours.
3. Students on the comprehensive-course route must complete the core courses listed above ( 24 credit hours) as well as a minimum of 6 credit hours from the closed electives and 6 credit hours from any university graduate offering provided that those chosen are appropriate to the student's program for a total of 36 credit hours.
4. All students in the Counselling Psychology program must complete 6720. The Internship may be fulfilled full-time or part-time and must comprise 600 clock hours with 240 hours of direct service with clients. It cannot be completed as part of your regular
employment. It is strongly recommended that students take no other course during the full-time internship.
5. Closed electives are those listed below:

6705 Nature and Development of School Counselling Services
6707 Assessment for Counsellors
6709 Assessment of Intelligence and Learning Skills (prerequisite: 3600 or its graduate equivalent 6707 . Normally, students in
Counselling Psychology will not enroll in this course until the latter part of their program). Students intending to pursue a career in
the K-12 school system in Newfoundland and Labrador are urged to take this course and the prerequisite.
6710 Issues in Development and Implementation of Special Education Policy and Practices
6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
6713 Educational Applications of Contemporary Cognitive Psychology
6714 Principles and Practices in Exceptionality
6716 Working with Families and Parents
6717 Counselling Adolescents
6718 Elementary School Counselling
6719 Cultural Issues in Counselling
6802 Adult Learning and Development
6938 Advanced Individual Counselling: Theory and Practice (prerequisite 6702 and 6708)
Notes: 1. Student membership in the Canadian Counselling Association (CCA) or other appropriate professional organizations is strongly recommended for all students in the program.
2. Students who plan to work in the school system should be aware of the Department of Education regulations to be eligible to work as a school counsellor.
3. Students who plan to become registered psychologists in Newfoundland and Labrador should review the requirements of the Newfoundland Board of Examiners in Psychology.

### 12.8.5 Post-Secondary Studies

The graduate programs in Post-Secondary Studies are designed to prepare students to function in a variety of roles in informal and formal post-secondary learning environments (including academic, technical, professional, adult and continuing education, health professional education, and student services/development). These programs facilitate a study of the post-secondary educational systems through an examination of their foundations, directions, organization and administration; and through curriculum and instructional development options for occupational preparation and adult education.

### 12.8.5.1 Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations,

1. applicants mush have two years of successful experience in working with adult learners is recommended; and
2. for the M.Ed. Post-Secondary Studies (Health Professional Education) and the Graduate Diploma in Post-Secondary Studies (Health Professional Education) program, applicants must have appropriate academic qualifications and work experience in a health-related field.

### 12.8.5.2 Program Requirements

1. Students for the Master of Education (Post-Secondary Studies) are required to complete courses that form the program core. 6100 Research Designs and Methods in Education 6801 Foundations of Post-Secondary Programs 6802 Adult Learning and Development 6803 Research in Post-Secondary Education and not fewer than 6 credit hours from closed electives in 7. below.
2. Students holding the Graduate Diploma in Post-Secondary Studies (Health Professional Education) and accepted in the Master of Education (Post-Secondary Studies) will complete up to 12 fewer credit hours dependent upon the chosen program route and the completion date of the Graduate Diploma
3. Students on the comprehensive-course route must complete 6890 Research and Development Seminar in Post-Secondary Studies.
4. Students on the internship route must complete 6891 Internship in Post-Secondary Studies (6 credit hours).
5. Normally, students will be permitted to register for 6890 and 6891 only after all other course requirements have been met.
6. To meet total credit hour requirements students may choose courses from other graduate offerings within the Faculty, the University, or other universities provided the courses chosen are appropriate to the student's program. Students on the thesis route must complete a total of at least 18 credit hours; and those on the internship or comprehensive-course route a total of at least 30 credit hours.
7. Closed electives are those listed below:

6804 Leadership and Human Resource Development in Post-Secondary Education
6805 Advanced Human Resource Communications
6806 Interprofessional Education in the Health Professions
6807 Economics and Finance of Post-Secondary Education
6822 Foundations of Instructional Design in Post-Secondary Education
6823 Principles of Program Design and Development
6831 Organization and Administration of Student Services
6832 Issues and Trends in the Administration of Post-Secondary Education
6841 Student Development Theory, Services and Programs in Post-Secondary Education
6940 Administration of Student Services in Post-Secondary Education

### 12.8.5.3 Program Requirements for Graduate Diploma in Post-Secondary Studies (Health Professional Education)

The Graduate Diploma in post-secondary studies, specialization in health professional education, which was created in collaboration with the Centre for Collaborative Health Professional Education, is designed to enhance health professionals' abilities as educators and leaders in educational program design, development, evaluation, and administration. The Graduate Diploma is intended for educators and educational leaders of formal and informal post-secondary health professional education programs.
Participants will engage in an in-depth study of the structure and organization of the post-secondary education system, theories and philosophies of adult learning and development; and through elective courses pursue studies of program development models,
instructional design frameworks, evaluation and assessment techniques, teaching methods, and research design principles in postsecondary teaching and learning. Opportunities will exist for the guided study of these topics as they relate to health professional education.

1. Students for the Graduate Diploma in Post-Secondary Studies (Health Professional Education) are required to complete courses that form the program core.
6801 Foundations of Post-Secondary Programs
6802 Adult Learning and Development
6806 Interprofessional Education in the Health Professions
and not fewer than 3 credit hours from closed electives in Program Requirements (M.Ed.), 7. above or from:
6100 Research Designs and Methods in Education
6803 Research in Post-Secondary Education
2. Students are encouraged to relate their assignments in these courses to health professional education.
3. Students enrolled in the Graduate Diploma program may request transfer to the Master of Education (Post-Secondary Studies). Courses for both the Graduate Diploma and the Degree must be appropriate to the program and chosen in consultation with the student's advisor.

### 12.8.6 Educational Technology

The graduate program in Educational Technology is offered in partnership with Cape Breton University (CBU). It is designed to facilitate the educational use of educational technology in a wide variety of settings. The program will be of interest to educators at all levels including K-12 teachers, school administrators, those in the post-secondary system, business and industry, as well as those in most other adult learning situations.
Educational technology in this Master of Education program encompasses, but is not limited to: computer, communications, networking, and multi-media applications. The overall intent of the program is to:

- provide educators with skill sets and pedagogical expertise that will enable them to address computer and related educational technology in a teaching/learning situation;
- develop potential educational technology leaders for the educational system;
- develop instructional designers, for a variety of educational settings, who are able to combine educational technology with learning theory to enhance curriculum development and delivery;
- provide a basis for the continued professional development of educators in the area of educational technology;
- develop an awareness of the applications of educational technology in a wide variety of educational contexts; and
- develop research expertise and potential in the use and application of educational technology for teaching and learning purposes.

Students for the program will have attained, prior to acceptance, some fundamental knowledge and skills with respect to educational technology through prerequisite experiences, and have attained a recognized undergraduate degree in an appropriate discipline with at least a second class standing (see specific regulations for details). The program components are designed to enable students to build on their prior experience through the development of pedagogical links and educational technology applications. It is intended that the program be offered primarily as a part-time program through distance delivered courses, with other delivery formats to be considered/ utilised where feasible. Access to specific computer hardware, software, and the Internet is required and will be the responsibility of each student.
A steering committee comprised of three members from each of the Faculty of Education at Memorial University of Newfoundland and the Institute for Education at CBU is responsible to the Associate Dean of Graduate Programs and Research, Faculty of Education, for selected aspects of the program. The latter include assessing student applications, recommending approval of instructors who are not regular faculty members at either CBU or Memorial University of Newfoundland, and recommending course or program changes. This committee is to be co-chaired by the Associate Dean of Graduate Programs and Research, Faculty of Education, Memorial University of Newfoundland and the Director of the Institute for Education at CBU, or their designate(s).
CBU courses offered as part of this program are indicated by the prefix "CBU EDU" followed by the specific course number.

### 12.8.6.1 Admission Requirements

Admission to the program is competitive and selective. Selection into the program is determined by an applicant's profile which would normally include such criteria as previous academic performance, related work experience, and relevant educational technology experience. More detailed information may be found on the Faculty of Education website.

### 12.8.6.2 Program Requirements

1. all students for the Master of Education (Educational Technology) must complete 6100 Research Designs and Methods in Education.
2. students on the thesis route must complete:
three credit hours from:
6610 Research on Computers in the Curriculum
6615 Educational Software Prototyping and Evaluation
6620 Issues and Trends in Educational Technology
nine credit hours selected from the core elective CBU courses approved for this program:
CBU EDU 5101 Assessment of Software and Information Technology Applications for Education
CBU EDU 5103 Integration of Instructional Design and Information Technology
CBU EDU 5105 Designing Web-based Learning
CBU EDU 5106 Technology Planning for Educational Environments
CBU EDU 5107 Information Management for Educational Environments
CBU EDU 5131 Digital Citizenship
three credit hours from: 6822, 6823, 6802, 6426, 6927 or from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate for each student's program and approved by the program steering committee.
3. students on the comprehensive-course route must complete:

- six credit hours selected from $6610,6615,6620$
- twelve credit hours selected from CBU EDU 5101, EDU 5103, EDU 5105, EDU 5106, EDU 5107, EDU 5131
- E6590 Research and Development Seminar in Educational Technology in Education
- three credit hours from 6822, $6823,6802,6426,6927$ or from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate for each student's program and approved by the program steering committee
- additional credit hours appropriate to a student's program, and approved by the program steering committee, to be chosen from graduate course offerings at Memorial University of Newfoundland, CBU, or any other university to complete the required 30 credit hours for the comprehensive-course route

4. normally, students will be permitted to register for 6590 only after all other course requirements have been met.
5. students who have successfully completed the CBU graduate diploma in Educational Technology can receive up to 12 advanced standing credit hours appropriate to their Degree option (nine CBU EDU course credit requirements for the thesis route or twelve CBU EDU course credit requirements for the comprehensive course route). Courses which qualify for transfer include CBU EDU 5101, EDU 5103, EDU 5105, EDU 5106, EDU 5107, EDU 5131).
6. thesis-route students will be subject to Theses and Reports of the School of Graduate Studies, Memorial University of Newfoundland, supervised by a faculty member at Memorial University of Newfoundland, and where feasible co-supervised by a CBU faculty member.

### 12.9 Courses

Course descriptions for graduate courses in Education are available at the Faculty of Education graduate website.
A selection of the following graduate courses shall be offered to meet the requirements of students, as far as the resources of the Faculty allow.
6100 Research Designs and Methods in Education
6105 Social and Cultural Difference and Education
6106 Popular Culture and Literacy Education
6107 Arts Education: Creativity in the Classroom
6108 Literacy and Language Education: Sociocultural Perspectives
6202 Social Context of Educational Leadership
6203 Leadership: Theory and Practice
6204 Educational Administration: Theory and Practice
6205 Educational Policy: Theory and Practice
6290 Research and Development Seminar in Educational Leadership Studies
6291 Internship in Educational Leadership Studies (6 credit hours)
6292 Project in Educational Leadership Studies ( 6 credit hours)
6293 Paper Folio in Educational Leadership Studies (6 credit hours)
6300 Teaching and Learning
6321 Supervisory Processes in Education
6330 Educational Finance
6335 Legal Foundations of Educational Administration
6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
6391 Internship in Curriculum, Teaching and Learning Studies (6 credit hours)
6392 Project in Curriculum, Teaching and Learning Studies ( 6 credit hours)
6393 Paper Folio in Curriculum, Teaching and Learning Studies (6 credit hours)
6394 Biographical Explorations of Teaching and Learning
6410 Seminar on Philosophical Issues in Educational Policy and Leadership
6420 Ethical Issues and Perspectives in Educational Practice and Policy
6425 Comparative Perspectives in Public Education, Reform, and Leadership
6426 Computer Applications in Educational Administration
6427 School Community Partnerships
6440 Family-School Relations: Leadership and Policy Implications
6461 Graduate Research Writing
6462 Cultural Landscapes, Knowledge and Pedagogy
6463 Relationships First: Rethinking Educational Engagement (credit may be obtained for only one of 6463 or 6936)
6465 School Violence: Leadership and Policy Implications
6466 Qualitative Research Methods
6467 Quantitative Research Methods
6468 Critical Approaches to Educational Research
6469 Theoretical and Methodological Foundations of Âction Research
6502 Contexts of Music Education
6503 Teaching Music from the Podium
6504 Musicianship, Pedagogy, and Learning
6590 Research and Development Seminar in Information Technology in Education
6600 Learning and Motivation
6602 Curriculum Studies
6603 Place, Ecology and Education
6610 Research on Computers in the Curriculum
6615 Educational Software Prototyping and Evaluation
6620 Issues and Trends in Educational Computing
6630 Critical Issues in Mathematics Education
6632 Current Research in Teaching and Learning of Elementary School Mathematics (prerequisite: 6630)
6634 Teaching and Learning to Solve Mathematics Problems (prerequisite: 6630)
6635 Teaching and Learning Geometry
6636 Teaching and Learning the Concept of Number and Operations
6639 Technology and the Teaching and Learning of Mathematics (prerequisite: 6630)
6641 Writing in the Primary, Elementary and Secondary Schools
6642 Developmental Reading (K-8)
6643 Contemporary Issues in Intermediate and Secondary English
6644 Drama in Education
6645 Literature for Children and Adolescents
6646 Literature in the Secondary School
6647 Diagnosis and Remediation of Reading and Writing Difficulties
6649 Exploring Multiple Literacies
6653 Contemporary Issues in Science Education I

6655 The Nature of Science and Science Education
6658 Teaching and Learning Scientific Concepts, Laws, and Theories
6660 Information Technology
6661 Applications of Media in Education
6662 Research Seminar in Teacher-Librarianship
6663 The Organization of Learning Resources
6664 Seminar in School Improvement
6668 Current Issues in Second Language Education
6669 Graduate Seminar in Second Language Teaching and Learning
6670 Teaching and Learning Social Studies
6671 Research in Social Studies Education
6672 Issues and Trends in Social Studies
6673 Second Language Teaching, Learning and Curriculum (credit may be obtained for only one of Education 6673, the former 6665 or 6667)

6674 Research in Second Language Writing Education
6675 Current Issues in Rural Education
6676 Research and Practice in TESL/TEFL (Teaching English as a Second/Foreign Language)
6693 Literacy for the Young Child in Home and School
6700 Ethical and Legal Issues in Counselling
6701 Issues and Methodologies in Learning and Developmental Research
6702 Counselling: Theory and Practice
6705 Nature and Development of School Counselling Services
6706 Career Education and Career Counselling
6707 Assessment for Counsellors
6708 Group Counselling: Theory and Practice
6709 Assessment of Intelligence and Learning Skills
6710 Issues in Development and Implementation of Special Education Policy and Practices
6711 Behaviour Modification in the Educational Setting
6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
6713 Educational Applications of Contemporary Cognitive Psychology
6714 Principles and Practices in Exceptionality
6715 The Theory and Practice of Peer Helping Programs
6716 Working with Families and Parents
6717 Counselling Adolescents
6718 Elementary School Counselling
6719 Cultural Issues in Counselling
6720 Internship in Counselling Psychology ( 9 credit hours)
6755 Nature and Assessment of Learning Disabilities
6801 Foundations of Post-Secondary Programs
6802 Adult Learning and Development
6803 Research in Post-Secondary Education
6804 Leadership and Human Resource Development in Post-Secondary Education
6805 Advanced Human Resource Communications
6806 Interprofessional Education in the Health Professions
6807 Economics and Finance of Post-Secondary Education
6822 Foundations of Instructional Design in Post-Secondary Education
6823 Principles of Program Design and Development
6831 Organization and Administration of Student Services for the Adult Learner
6832 Issues and Trends in the Administration of Post-Secondary Education
6841 Student Development Theory, Services and Programs in Post-Secondary Education
6890 Research and Development Seminar in Pôst-Secondary Studies
6891 Internship in Post-Secondary Studies (6 credit hours)
6900-6910 Special Topics (excluding 6909)
6909 Narrative Approaches to Teaching, Learning and Research
6911 Multiage Education: An Introduction
6912-6950 Special Topics (excluding 6913, 6923, 6924, 6927,6931, 6932, 6936, 6938, and 6940)
6913 Putting Action Research Methodologies into Practice (prerequisite: 6469 Theoretical and Methodological Foundations of Action
Research)
6923 Perspectives in Indigenous Education
6924 Decolonizing Pedagogies
6927 Digital Game-based Learning
6931 Educational Technology Law
6932 Intellectual Technology Law in Teaching and Learning
6938 Advanced Individual Counselling: Theory and Practice (prerequisite 6702 and 6708)
6940 Administration of Student Services in Post-Secondary Education

## 13 Regulations Governing the Degree of Master of Employment Relations

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/sgs
The Master of Employment Relations (M.E.R.) is a multidisciplinary program providing advanced level study of all aspects of the employment relationship.
The M.E.R. program is offered by full-time or part-time study and involves 36 credit hours of course work. Students registered on a fulltime basis will normally complete the program in one academic year. The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 13.1 Administration

1. The program shall be administered by a Director, who reports to the Dean of Graduate Studies. The Director shall be appointed by
the Dean of Graduate Studies on the recommendation of the Deans of Humanities and Social Sciences and Business Administration. In making this recommendation, the Deans of Humanities and Social Sciences and Business Administration shall consult with the employment relations community both within and outside the University.
2. An Executive Committee consisting of the Director and Deans of Humanities and Social Sciences, Business Administration, and Graduate Studies will be established to review administrative, resource, and strategic planning issues related to the program. This committee shall be chaired by the Dean of Graduate Studies.
3. The Director shall consult with the Graduate Committee in Employment Relations (GCER) for the purposes of administering the academic elements of the program. The GCER shall normally consist of 11 members appointed by the Dean of Graduate Studies on the recommendation of the Director. The GCER will include the Director, who shall Chair the committee, approximately six faculty members from the Faculties of Humanities and Social Sciences and Business Administration who teach core courses, the Associate Deans or Directors of Graduate Studies from Humanities and Social Sciences and Business Administration, as well as one full-time and one part-time student representative.
4. An Advisory Board in Employment Relations (ABER) shall be established for the purposes of consulting with obtaining feedback from the employment relations community. The ABER will consist of a broad cross-section of members from the employment relations community both within and outside the University who shall be appointed by the Dean of Graduate Studies on the recommendation of the Director.

### 13.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission to the M.E.R. program, an applicant shall have:
a. An undergraduate degree, normally with a minimum degree average of $70 \%$ from an institution recognized by Senate; and
b. An undergraduate course in statistics, microeconomics, and one of organizational behaviour, sociology of work or labour history from an institution recognized by Senate, normally with a minimum grade of $70 \%$ in each course.
3. Qualified applicants with relevant experience will normally receive preference during the evaluation of applications.
4. It is highly recommended that non-Canadian applicants submit a sample of their academic writing and achieve a satisfactory result on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE)
5. In exceptional cases, applicants who have not completed an undergraduate degree, but who meet all other requirements, may be considered for admission. Preference will be given to those who have a minimum of 10 years of full-time professional experience, including demonstrated success in employment relations, and who have successfully completed substantial university course work including several courses at an advanced undergraduate level from an institution recognized by Senate. Applicants without an undergraduate degree must have completed one or more undergraduate courses in organizational behaviour, statistics, and microeconomics, from an institution recognized by Senate, normally with a minimum grade of $70 \%$ in each course. Any applicants who do not meet normal admission requirements may also be required to successfully complete the GMAT or the GRE with a satisfactory result and/or additional undergraduate courses before being considered for admission.
6. Applicants who did not complete a four-year baccalaureate degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher).
c. Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

### 13.3 Deadlines for Applications

1. Applicants seeking full-time enrolment will normally only be admitted to the program in the Fall (September) semester.
2. Applications must be postmarked no later than February 15 for applicants wishing to enter full-time or part-time studies in the Fall (September) semester.
3. Applications must be postmarked not later than August 15 for applicants wishing to enter part-time studies in the Winter (January) semester.
4. Individuals submitting applications later than the above dates are not assured of consideration for admission to the program in the semester desired; their applications will be processed only if time and resources permit.

### 13.4 Procedure for Admission

1. Applications for admission to the M.E.R. program must be made on the appropriate form and submitted to the School of Graduate Studies.
2. The following documents must be submitted in support of the official application form:
a. Letter of appraisal from two referees, one of whom is capable of appraising the applicant's academic potential as a graduate student, and of whom is capable of appraising the applicant's professional experience and/or actual or likely success in a career in employment relations.
b. The M.E.R. Employment Experience Information Form.
c. Official transcripts from each university or other post-secondary institution previously attended, to be sent directly by its Registrar (or equivalent officer) to the School of Graduate Studies. If not recorded on the transcript, official evidence of completion of undergraduate degree must also be submitted.
3. Application files are normally evaluated after the deadline dates for application noted above and only when all required documentation has been received.
4. Admission shall be by the Dean of Graduate Studies on the recommendation of the GCER. Upon notification from the Dean of the School of Graduate Studies of acceptance into the M.E.R. program, applicants must give written notice to the School of Graduate Studies of their intention to register.

### 13.5 Program of Study

1. The M.E.R. program consists of 36 credit hours of course work as specified in Table 1. These include 33 credit hours of compulsory courses and 3 credit hours of an elective course. The compulsory courses are comprised of 24 credit hours of core courses specified in Table 2 and 9 credit hours for a research seminar.
2. The compulsory core courses introduce students to the three main areas of study in the program: labour-management relations; human resources management; and labour market and social policy analysis.
3. The elective allows students to specialize in one of the three main areas of study. The elective must be chosen from the list of approved electives specified in Table 3. Other courses may be approved and added to Table 3 from time to time by the GCER.
4. Students are responsible for fulfilling all prerequisites and may require special permission from the Department offering an elective to enrol in the course.
5. The Research Seminar in Employment Relations provides students with both quantitative and qualitative research skills and requires the identification of a research problem, the development and execution of a methodology appropriate to addressing the problem, analysis of results, and completion of final report. The Research Seminar involves 3 credit hours of course work in each of the Fall, Winter, and Spring semesters.
6. The prerequisites for EMRE 6030 and EMRE 6040 are EMRE 6010 and EMRE 6020. In addition, students will normally complete six M.E.R. courses before registering for EMRE 6030 or EMRE 6040 . There are no prerequisites for EMRE 6010 and EMRE 6020 but students are advised to take these courses late in their programs, just before taking EMRE 6030 or EMRE 6040 . For the core courses, the prerequisite for BUS1 9329 is BUS1 8210. For the remaining core courses, there are no prerequisites. For the elective courses, Departmental regulations that specify particular courses as prerequisites will apply but the Departmental requirement to have completed a number of courses will not apply.
7. A waiver of a core course may be granted by the Dean of Graduate Studies on the recommendation of the Director if the student can demonstrate that the material in the course has been substantially covered by other courses taken at this or another recognized university. In such cases, the course must be replaced by another course offered by Memorial University of Newfoundland in consultation with the student, and approved by the Director. The maximum number of core courses that can be waived is 3 and all replacement courses must be taken during the student's period of enrollment in the program.
8. Each student's program of study must be approved by the Director. The Director reserves the right to restrict students from taking particular courses if it is deemed that those courses do not add sufficient value beyond courses that the student has completed at the undergraduate level.

### 13.6 Evaluation

1. Students for the M.E.R. Degree must obtain a grade of $B$ or better in all program courses.
2. Students who receive a grade of less than $B$ in a program course will be permitted to remain in the program, provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Director and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

### 13.7 Courses

The schedule of courses for the M.E.R. program is normally as follows:
Table 1 Master of Employment Relations Schedule of Courses


Table 2 Master of Employment Relations Core Courses

## Business

Business 8204 Human Resource Management Business 8210 Labour Relations
Business 9329 Labour Law

## Employment Relations

Employment Relations 6050 Interpersonal skills in Employment Relations

[^32]Table 3 Master of Employment Relations Elective Courses

## Labour-Management Relations

Business 9013 Collective Agreement Administration and Arbitration Business 9030 International and Comparative Industrial Relations Employment Relations 6030: Independent Research Project

## Human Resource Management

Business 9020 International Human Resource Management
Business 9043 Team Building and Diversity
Business 9317 Current Topics in Management
Business 9324 Gender, Work and Organizations
Business 9328 Change Management
Education 6203 Leadership: Theory and Practice
Education 6600 Learning and Motivation
Education 6706 Career Education and Career Counselling
Education 6802 Adult Learning and Development
Education 6805 Advanced Human Resource Communications Employment Relations 6030 Independent Research Project Psychology 6401 Attitudes and Social Cognition
Psychology 6402 Group Processes

Labour Market and Social Policy Analysis
Business 8108 Economics for Business
Economics 6000 Advanced Micro-economic Theory
Economics 6001 Advanced Macro-economic Theory
Education 6410 Philosophical Issues in Educational Policy and Leadership
Employment Relations 6030: Independent Research Project Gender Studies 6000 Feminist Theory
History 6000 Advanced Studies in Newfoundland History
History 6010 Advanced Studies in Canadian History
History 6070 Advanced Studies in Social History
History 6090 Advanced Studies in Women's History
History 6120 Advanced Studies in Economic and Business History
Political Science 6700 Canadian Politics
Political Science 6740 Public Administration
Political Science 6790 Public Policy
Sociology 6320 Gender and Society
Sociology 6370 Feminist Theory and Methods

Note: Students may require special permission from the instructor and/or relevant graduate program administrator prior to enrolling in an elective course.

## 14 Regulations Governing the Degree of Master of Engineering

www.mun.ca/sgs/contacts/sgscontacts.php www.engr.mun.ca
The degree of Master of Engineering (M.Eng.) is a research-focused degree and may be obtained either through full-time or part-time studies. The M.Eng. degree can be obtained through programs in Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, Oil and Gas Engineering, and Process Engineering.
In addition to the Master of Applied Science and Master of Engineering programs offered by the Faculty of Engineering and Applied Science, the Faculty also offers a course-based graduate diploma in Safety and Risk Engineering. For further information on this program refer to the regulations governing the Graduate Diploma in Engineering.

### 14.1 Qualifications for Admission

To be considered for admission, an applicant shall meet the requirements set out in General Regulation, Qualification for Admission, or shall have qualifications and/or engineering experience that is acceptable to the Dean of Graduate Studies and to the Faculty of Engineering and Applied Science.
Admission to the M.Eng. program is limited and competitive. All applicants must meet the minimum qualifications set out in the above paragraph. Decisions on admission, however, will also take into account such things as the applicant's rank in class, referees' assessments, general performance throughout the applicant's undergraduate academic program, and the availability of supervisors in the area of the applicant's interest.
Normally applicants will be considered in January for admission to the following September. In special cases applicants may also be considered in April and August. Applications should be made sufficiently far in advance to permit the University to obtain all relevant documents and review the application.
Students who have successfully completed the requirements for the Graduate Diploma in Safety and Risk Engineering may receive transfer credits towards the M. Eng. degree in an affiliated area

### 14.2 Program of Study and Research

1. Students enrolled in the Master of Engineering program will work in one of the following areas: Civil Engineering; Computer Engineering; Electrical Engineering; Mechanical Engineering; Ocean and Naval Architectural Engineering; and Oil and Gas Engineering.
2. A program shall hormally consist of:
a. a thesis related to the area of study
b. 12 credit hours from graduate courses with at least 6 credit hours taken from the list of Core Courses below
c. Seminar course 9100
d. such other courses as may be required in an individual's program.
3. The thesis is to contain the results of a systematic investigation which has been conducted by the student under the direction of the Supervisor.
4. With the approval of the Dean of Graduate Studies and on the recommendation of the Faculty of Engineering and Applied Science, credit towards the course requirements may be considered for graduate courses previously taken by the student in accordance with the General Regulations for course credit transfers.

### 14.3 Supervision

1. Each student shall be assigned to a Supervisor approved by the Dean of Graduate Studies on the recommendation of the Faculty of Engineering and Applied Science.
2. The Supervisor shall propose a tentative program of study and topic of investigation which must be approved by the Dean of Graduate Studies acting on the recommendation of the Faculty of Engineering and Applied Science, before the acceptance of a student in the program.
3. At the end of each semester, the Supervisor shall report on the student's progress to the Dean of Engineering and Applied Science for onward transmission to the Dean of Graduate Studies
4. A temporary or permanent change of Supervisor for a student already in a program shall be permitted only with the approval of the

Dean of Graduate Studies and the Dean of Engineering and Applied Science.
5. The Supervisor shall advise the student in the preparation and presentation of a seminar on the student's topic of investigation as described in Thesis, 2. below.

### 14.4 Industrial Internship Option

The Faculty encourages graduate students to undertake internships of work in industry. Internships in industry will permit students either (a) to focus on the practicalities of research projects which have been well defined before the student enters an internship, or (b) to develop and define a research project from problems experienced during the internship. Encouragement to undertake an internship will be given only where it is clear that one of these expectations can be met.
Students registered in the Master of Engineering Program may, with the permission of their Supervisor, the Dean of the Faculty of Engineering and Applied Science, and the Dean of Graduate Studies select the Industrial Internship Option. Students approved to pursue this option must satisfy the degree regulations for a Master of Engineering Program. In addition, students in the Industrial Internship Option:

1. must take at least 9 credit hours of the courses required for their program on campus; the remaining required courses may be taken on or away from campus; those taken at other universities require pre-approval by the Dean of the School of Graduate Studies on the recommendation of the Faculty of Engineering and Applied Science
2. shall normally spend 8 to 12 months of their program at an internship in industry
3. shall normally spend at least two semesters on campus on a full-time basis as a graduate student at this University
4. shall submit a concise progress report to their supervisors, no later than the end of each semester while on an internship.

### 14.5 Fast-Track Option

Students registered in academic term 7 of a Memorial University of Newfoundland undergraduate engineering program are eligible to apply for admission to an M.Eng. fast-track option. The purpose of the option is to encourage students interested in pursuing graduate studies to begin their research-related activities while still registered as an undergraduate student. Normally, to be considered for admission to the option, students must have achieved at least a $70 \%$ average over academic terms 1 to 6 of their undergraduate engineering program. While enrolled in the option, a student may complete some of the M.Eng. Degree requirements and, hence, potentially be able to graduate earlier from the M.Eng. program.
Students shall enroll in the M.Eng. fast-track option concurrently with their undergraduate program dutring the Fall semester prior to academic term 8. Prior to entering the fast-track option, students must apply for and receive an exemption from work term 6. While enrolled in the option a student must be registered in full-time graduate studies during the Fall semester prior to academic term 8; during academic term 8, the student must take a leave of absence from the graduate program. A student enrolled in the fast-track option shall undertake research related to their field of study and shall normally complete at least 3 credit hours from the courses listed for their M. Eng. program in the Fall semester prior to academic term 8.

In the Fall semester following academic term 7, fast-track option students will pay only the graduate fees appropriate to graduate students following plan A as indicated at the Financial and Administrative Services website at www.mun.ca/finance/fees/ (i.e., the 6 semester plan). In the succeeding Winter semester, while completing academic term 8 of their undergraduate program, fast-track option students will pay only the appropriate undergraduate fees.
Upon completion of their undergraduate program, students may register in the M.Eng, program on a full-time basis. All courses taken as part of their graduate program while enrolled in the M.Eng. fast-track option are credited towards the M.Eng. Degree course credit hour requirements. Courses taken as credit towards a student's undergraduate degree may not be credited towards a student's graduate degree; courses credited towards a student's graduate degree may not be credited towards a student's undergraduate degree. Students who do not complete their undergraduate degree within one year of entering the fast-track option will normally be required to withdraw from their M.Eng. program.

### 14.6 Course Evaluation

1. In order to continue in the program, a student shall obtain an A or B grade in each course taken for credit.
2. The student's achievement in the program must be to the satisfaction of the Dean of Graduate Studies and the Faculty of Engineering and Applied Science. When it has been determined on the basis of consultations with the student, the course instructors and the Supervisor, that a student's work has fallen below satisfactory level, the student may be required to withdraw from the program

### 14.7 Thesis

1. A student who expects to graduate must inform the Dean of Graduate Studies of this intention at least three months before the University Convocation at which the award of the degree is expected.
2. Before the thesis is submitted, the student shall present an open seminar on the topic of investigation to the Faculty of Engineering and Applied Science. Any serious deficiencies noticed at this stage should be carefully considered, in consultation with the Supervisor, for rectification.
3. Three copies of the thesis shall be submitted to the School of Graduate Studies through the Faculty of Engineering and Applied Science, in a form and format as specified in the Thesis Guide issued by the School of Graduate Studies and the Presentation of Theses Guide issued by the Faculty of Engineering and Applied Science. A submission which does not meet the specifications will be returned to the student.
Examiners shall be appointed by the Dean of Graduate Studies on the recommendation of the Faculty of Engineering and Applied Science soon after the student has expressed an intention to submit the thesis.

### 14.8 Evaluation of Theses

Theses evaluation shall be carried out in accordance with Theses and Reports of the General Regulations governing all students in the School of Graduate Studies.

### 14.9 Recommendation for Awarding Degree

When a student has completed all the requirements for the Master of Engineering (M.Eng.) Degree, the Faculty of Engineering and Applied Science shall forward a recommendation to the Dean of Graduate Studies for the award of the Degree.

### 14.10 Graduate Diploma in Engineering

The Faculty of Engineering and Applied Science offers course-based graduate diplomas in engineering to provide opportunities for engineers to obtain credentials or upgrade their training in various specialized areas of engineering. The programs are available on a full-time or part-time basis.

### 14.10.1 Qualifications for Admission

Admission to the program is limited and competitive. To be eligible for consideration for admission, an applicant shall meet the requirements described under General Regulations, Qualification for Admission, or shall have qualifications and/or engineering experience that is acceptable to the Dean of Graduate Studies and to the Faculty of Engineering and Applied Science. To be eligible for consideration for admission, applicants will meet English proficiency requirements described under General Regulations, English Proficiency Requirements.

### 14.10.2 Program of Study

The graduate diploma program requires the completion of 15 credit hours consisting of three core and two elective courses.

### 14.10.2.1 Arctic Engineering

Engineering 9052, 9062, and 9092; and two courses selected from Engineering 9090, 9096, 9501, 9506, 9516

### 14.10.2.2 Communications Engineering

Engineering 9871, 9872, and 9878; and two courses selected from Engineering 9806, 9821, 9825, 9876, 9877

### 14.10.2.3 Geotechnical and Structural Engineering

Engineering 9501, 9723, and 9760; and two courses selected from Engineering 9002, 9022, 9505, 9520, 9750, 9755
14.10.2.4 Mechanics and Materials Engineering

Engineering 9210, 9520, and 9550; and two courses selected from Engineering 9501, 9516, 9540, 9982
14.10.2.5 Mechatronics Engineering

Engineering 9804, 9826, and 9940; and two courses selected from Engineering 9496, 9516, 9685, 9875

### 14.10.2.6 Safety and Risk Engineering <br> Engineering 9115, 9121, and 9411; and two courses selected from Engineering 9116, 9516, 9609, 9622

### 14.10.2.7 Thermofluids Engineering

Engineering 9901, 9977, and 9985; and two courses selected from Engineering 9211, 9420, 9501, 9902, 9979

### 14.11 Master of Applied Science Programs

The Faculty of Engineering and Applied Science offers the following course-based programs:

### 14.11.1 Computer Engineering

In addition to the research-focused M. Eng. Degree in Computer Engineering, the Faculty of Engineering and Applied Science offers a course-based program in Computer Engineering leading to a Master of Applied Science Degree in Computer Engineering. For details of program requirements for the M.A.Sc. Degree in Computer Engineering, refer to the regulations governing the Degree of Master of Applied Science.

### 14.11.2 Environmental Systems Engineering and Management

The Faculty of Engineering and Applied Science offers a course-based program in Environmental Systems Engineering and Management. For the details of the program requirements for the M.A.Sc. Degree in Environmental Systems Engineering and Management refer to the regulations governing the Degree of Master of Applied Science in Environmental Systems Engineering and Management.

### 14.11.3 Oil and Gas Engineering

The Faculty of Engineering and Applied Science offers a course-based program in Oil and Gas Engineering. For the details of the program requirements for the M.A.SC. degree in Oil and Gas Engineering refer to the regulations governing the Degree of Master of Applied Science in Oil and Gas Engineering.

### 14.12 Courses

A selection of the following graduate courses will be offered to meet the requirements of the students, as far as the resources of the Faculty will allow.

### 14.12.1 Required Course

9100 Engineering Graduate Seminar (1 credit hour)

### 14.12.2 Core Courses

9002 Ocean Engineering Structures
9015 Ocean Engineering Hydrodynamics
9110 Advanced Petroleum Production Engineering
9113 Phase Behaviour of Petroleum Reservoir Fluids
9114 Advanced Reservoir Engineering
9115 Safety and Risk Engineering

9118 Advanced Drilling Engineering
9121 Advanced Safety, Risk and Reliability Modeling
9211 Experimental Methods
9310 Advanced Reactor Analysis and Bioreactors
9320 Advanced Separation Processes
9330 Abnormal Situation Management and On-line Monitoring
9340 Material Degradation in Process Facilities
9411 Probabilistic Methods in Engineering
9420 Engineering Analysis
9496 Modeling and Simulation of Dynamic Systems
9501 Finite Element Analysis with Engineering Applications
9505 Structural Dynamics and Vibrations
9516 Similitude, Modelling and Experimental Data Analysis
9520 Solid and Structural Mechanics
9550 Fatigue, Fracture and Corrosion
9609 Environmental Risk Assessment
9627 Environmental Systems Engineering
9816 Antenna Theory
9821 Digital Signal Processing
9826 Advanced Control Systems
9827 Continuous and Discrete-Event Systems
9834 Advanced Power Electronics
9847 Computer and Control Methods in Power Systems
9853 Energy Economics and Policy
9854 Fundamentals of Energy Systems
9855 Energy and the Environment
9856 Electrical Power Systems
9857 Instrumentation and Control of Energy Systems
9858 Advanced Power Systems
9861 High-Performance Computer Architecture
9865 Advanced Digital Systems
9867 Advanced Computing Concepts for Engineering
9871 Information Theory and Coding
9874 Software Design and Specification
9876 Advanced Data Networks
990A MESE Project Course
990B Continuation of MESE Project Course
9901 Fundamentals of Fluid Dynamics
9902 Advanced Transport Phenomena
9909 Advanced Thermodynamics
9940 Advanced Robotics
9977 Computational Fluid Dynamics

### 14.12.3 Other Courses

9022 Marine Geotechnical Engineering
9052 Ice Properties and Mechanics
9080/99 Special Topics in Ocean Engineering (excluding 9096)
9096 Marine and Offshore Ice Engineering
9111 Well Testing
9112 Multiphase Flow
9116 Reliability Engineering
9117 Offshore Petroleum Geology and Technology
9119 Compact Process Equipment Design
9120 Advanced Natural Gas Engineering
9150-59 Special Topics in Oil and Gas Engineering
9200 Industrial Internship
9210 Advanced Engineering Materials
9390/94 Special Topics in Engineering Management
9440 Optimization Principles in Engineering
9495/99 Special Topics in Engineering Analysis (excluding 9496)
9540/49 Special Topics in Mechanics, Structures and Materials
9560 Applied Remote Sensing
9601 Environmental Pollution and Mitigation (cross-listed as Environmental Science 6004)
9603 Environmental Sampling and Pollutant Analysis (cross-listed as Environmental Science 6005)
9605 Water and Wastewater Treatment
9610/15 Special Topics in Environmental Engineering and Applied Science
9621 Soil Remediation Engineering
9622 Environmental Statistics
9625 Environmental Impacts of Offshore Oil and Gas Operations
9626 Environmental Management System
9628 Environmental Laboratory
9629 Environmental Policy and Regulations
9630 Pollution Prevention
9713 Stochastic Hydrology
9723 Soil Properties and Behaviour (formerly 9720)
9750 Advanced Topics in Analysis and Design of Reinforced Concrete (formerly 9701)
9755 Advanced Topics in Precast and Prestressed Concrete (formerly 9702)
9760/64 Special Topics in Geotechnical Engineering
9790 Subsea Pipeline Engineering
9791/99 Special Topics in Civil Engineering
9802/05 (excluding 9804) Special Topics in Computer Engineering

9804 Industrial Machine Vision
9806/09 Special Topics in Communications Engineering
9815 Electromagnetic Propagation
9822 Nonlinear Digital Image Processing and Analysis
9825 Random Signals (formerly 9830)
9835 Advanced Electric Machines
9841 Thermal Power Plants
9843 Solar Engineering
9845 Energy Storage
9848 Power System Stability (formerly 9812)
9849 Power System Protection
9850/53 Special Topics in Power Systems and Controls
9862 Power System Protection
9863 Grid Integration of Energy Systems
9868 ASIC Design
9869 Advanced Concurrent Programming
9872 Digital Communications9866 Fault-Tolerant Computing (formerly 9846)
9873 Image Communications
9875 Embedded and Real-Time Systems Design
9877 Computer and Communications Security
9878 Wireless and Mobile Communications
9879 Formal Specification and Development
9880/83 Special Topics in Computer Engineering
9884/87 Special Topics in Signal Processing
9888/91 Special Topics in Communications Engineering
9892/95 Special Topics in Power Systems and Controls
9896 Renewable Energy Systems
9897/99 Special Topics in Applied Electromagnetics
9910 Advanced Manufacturing
9920 Advanced Concepts in Mechanical Design
9925 Theory and Design of Mechanical Components and Structures
9971 Nonlinear and Random Vibrations Analysis
9975/99 (excluding 9977 and 9979) Special Topics in Mechanical Engineering
9979 Fluid Structure Interactions
9985 Advanced Heat Transfer
9987 Interfacial and Phase Change Phenomena

## 15 Regulations Governing the Degree of Master of Environmental Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
(see also Master of Science in Environmental Science)

### 15.1 Program of Study

1. The Environmental Science Program is an interdisciplinary graduate program involving the departments of the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Mediccine, and the Faculty of Engineering and Applied Science. There are three Environmental Science Graduate Degree streams: the Master of Science (M.Sc., Environmental Science), Master of Environmental Science (M.Env.Sci.), and the Doctor of Philosophy (Ph.D., Environmental Science). The program is available on a full or part-time basis.
2. The program is administered by a Board of Studies appointed by the Dean of Science. Supervisors of graduate students in the program include faculty from the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Engineering and Applied Science, the Faculty of Medicine, and the Environmental Science Program at the Grenfell Campus, as well as adjunct appointees to the program (as a co-supervisor).

### 15.2 Qualifications for Admission

Admission is limited and competitive. To be considered for admission applicants shall normally hold a Bachelor's (Honours) degree in Science, Geography, or Environmental Science with at least second class standing, or equivalent, or a Bachelor's degree in Engineering from an institution recognized by the Senate, or shall have qualifications and/or environmental experience acceptable to the Dean of Graduate Studies and the Board of Studies. The Board of Studies will make recommendations on admission to the Dean of Graduate Studies.

### 15.3 Degree Requirements

To the extent that resources permit, individual programs will be developed to suit students' interests and needs. However all programs must be approved by the Board of Studies and by the Dean of Graduate Studies. All General Regulations of the School of Graduate Studies shall apply to these degrees.

1. The Master of Environmental Science (M.Env.Sci.) is a multidisciplinary course-based degree, focussed on environmental issues. The Degree program provides for both multidisciplinary courses and for courses focussed on the student's specific area of interest.
2. The Degree program requires completion of 24 credit hours of either Option A or Option B and a project report. The project report will be evaluated according to procedures outlined in General Regulations, Theses and Reports.

## Option A

Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be Environmental Science 6000, Environmental Science 6009, and Environmental Science 6010 and 6 credit hours from Environmental Science 6001, 6002 , and 6003. Students will also be required to take a minimum of 9 credit hours in elective courses approved by the Board of Studies, 6 credit hours of which will normally be selected from graduate courses offered by the Faculty of Science and the Faculty of Engineering and Applied Science. Students are advised to consult with instructors and Faculties regarding necessary prerequisites
and availability.

## Option B

Admission into Option B is limited, competitive and selective. Students may be requested to participate in an interview as part of the selection process. The application deadline for admission to Option B is October 15th.
Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be Environmental Science 6000, Environmental Science 6009, and Environmental Science 6010 and 6 credit hours from Environmental Science 6001, 6002 , and 6003. Students will also be required to take a minimum of 6 credit hours in elective courses approved by the Board of Studies, normally selected from graduate courses offered by the Faculty of Science and Faculty of Engineering and Applied Science. In addition, students will be required to complete the 3 credit hours course Environmental Science 601 W (work term).
Environmental Science 601 W is a work term of one semester duration. The work term is a full-time period of employment, normally paid and normally in the spring semester. Students are ultimately responsible for securing work term placements. Academic Staff Members in Co-operative Education, in consultation with the Program Chair and the student's Supervisor, provide support for the job search and inform students of potential opportunities. Work terms must be approved by the Academic Staff Members in Cooperative Education before the start of the term. Work term evaluations consist of two components:
a. On-the-job Student Performance: job performance shall be assessed by the Academic Staff Members in Co-operative Education using information gathered during the work term and input from the employer toward the end of the work term. Evaluation of the job performance will result in one of the following classifications: PASS WITH DISTINCTION, PASS, or FAIL.
b. Assignment(s): students are required to submit one or more assignments to the Academic Staff Members in Co-operative Education as outlined in the course syllabus. Evaluation of the assignment(s) will result in one of the following classifications: PASS WITH DISTINCTION, PASS, or FAIL.
Overall evaluation of the work term will result in one of the following final grades being awarded: PASS WITH DISTINCTION indicates the student received a grade of pass with distinction on both the on-the-job performance and the assignment(s). PASS indicates the student received a grade of PASS on both the on-the-job performance and the assignment(s) or a grade of PASS on one component and PASS WITH DISTINCTION on the other component. FAIL indicates the student receive a grade of FAIL on either one or both of the on-the-job performance and assignment(s).

### 15.4 Courses

6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology
6004 Environmental Pollution and Mitigation (cross-listed as ENG1 9601)
6007 Environmental Risk Assessment (cross-listed as ENGl 9609)
6008 Air Pollution (same as ENGI 9624)
6009 Environmental Science Project
6010 Environmental Seminar
6201-6210 Special Topics in Environmental Science
601W Work Term

## 16 Regulations Governing the Degree of Master of Fine Arts

www.mun.ca/sgs/contacts/sgscontacts.php
www.grenfell.mun.ca/academics-and-research/Pages/graduate-programs.aspx
The Master of Fine Arts is offered in the School of Fine Arts at the Grenfell Campus.

### 16.1 General Information

The Master of Fine Arts (MFA) is offered as a full-time or part-time, low residency program that can be completed in five semesters and provides the opportunity for advanced studies in visual arts.
This studio-based MFA supports student working in all genres and forms of visual arts practice including (but not limited to) photography, drawing, fibre, painting, print media, ceramics, time-based practices, sculpture, etc., within a framework of critical theory and discourse that offers a broad range of professional experiences. Graduate students will be supported to find the materials, processes, and practices that best suit their artistic research.
Students have access to facilities and faculty across a range of disciplines. Within the areas of specialization offered for the MFA there is considerable flexibility available to further focus the program to meet specific interests and needs.
The blended-learning, low-residency format can accommodate students who wish to complete the program over an extended period of time on a part-time basis.
The mode of delivery is flexible: students complete a total of two, four-week intensives on Grenfell Campus, Memorial University of Newfoundland during the Spring semester and may then complete the remainder of the course work and research at one or more Memorial University of Newfoundland Campuses or from their home community.
The program can be completed in five semesters of full-time study. It consists of six courses plus VART 6999 Final Project (Exhibition and Research Paper/Statement) and Oral Examination. The program is offered beginning in each Spring semester.

### 16.2 Qualifications for Admission

1. To be considered for admission, applicants shall meet the minimum requirements set out in General Regulation, Qualification for Admission. Applicants to the Master of Fine Arts, Visual Arts program, will normally hold a Bachelor of Fine Arts degree with a minimum overall B average or shall have equivalent professional visual arts experience that is acceptable to the Dean of Graduate Studies and to the School of Fine Arts.
2. In addition to meeting the General Regulations of the School of Graduate Studies, all applicants will be required to submit:
a. a portfolio of 20 images of examples of work or other documentation of visual art research;
b. a letter of intent (max. 500 words); and
c. two assessment reports or letters of reference.
3. Applicants may also be asked to submit a sample for their academic written work.
4. Applicants must demonstrate a high level of proficiency in studio research and practice within one or more, or a combination of disciplines in visual arts studio, including, but not limited to painting, print media, digital imaging, photography, drawing, sculpture, etc.
5. Applicants must demonstrate that they are suitably advanced, mature, and responsible to undertake and complete graduate studies in a Visual Arts Studio program and to conduct self-directed, independent research. They will be required to demonstrate evidence of strong thinking skills and writing skills.

### 16.3 Degree Requirements

1. The Degree of Master of Fine Arts is normally completed in five semesters of full-time study. All students must complete two onsite study periods in the Spring semester of both their first year and second year of study.
2. All students for the MFA must successfully complete 18 credit hours of course work plus the VART 6999 Final Project. Further courses may be required depending on the background of the individual student.
3. All students must complete:

Visual Art 6500 Seminar Intensive I
Visual Art 6510 Studio/Research Intensive
Visual Art 6600 Art Theory \& Criticism Course
Visual Art 670A/670B Independent Studio Research I \& II
Visual Art 6800 Seminar Intensive II
Visual Art 6810 Studio/Production Intensive
Visual Art 6999 Final Project (Exhibition and Research Paper/Statement) and Oral Examination

### 16.4 Evaluation

1. Students must meet all requirements of the General Regulations of the School of Graduate Studies.
2. Students must obtain a grade of at least a B in all program courses to receive credit for the course toward their program requirements. Students who fail to receive B or more in a required course must repeat the course. Any student who receives a grade of less than $B$ in two courses or in a repeated course will be required to withdraw from the program.

### 16.5 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the School will allow. All courses are 3 credit hours unless otherwise indicated.
VART 6500 Seminar Intensive I
VART 6510 Studio/Research Intensive
VART 6600 Art Theory \& Criticism Course
VART 670A/670B Independent Studio Research I \& II
VART 6800 Seminar Intensive II
VART 6810 Studio/Production Intensive
VART 6999 Final Project (Exhibition and Research Paper/Statement) and Oral Examination

## 17 Regulations Governing the Degree of Master of Gender Studies

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/genderstudies

### 17.1 General Information

The Master of Gender Studies degree allows students to examine critically - at an advanced level - how gender shapes our identities, our social interactions and our world. Students will incorporate, into their study, frameworks for thinking about power relations and the ways those relations are shaped and challenged by intersecting constructions of gender, race, class, sexuality, age, ability, and nationality.
Faculty members in the Department of Gender Studies bring research expertise and interests in a range of fields, including: citizenship and human rights; corporeal feminism; reproductive rights, auto-biography, and life writing; postcolonial and transnational feminisms; and First Nations studies. This master's program offers a thriving environment that draws on the expertise of scholars from a wide range of academic disciplines.
The program is administered by the Department of Gender Studies and the Graduate Studies Advisory Committee.
The Graduate Co-ordinator, on behalf of the Department of Gender Studies, Graduate Studies Advisory Committee, makes recommendations to the Dean of Graduate Studies concerning admission, and financial support for students, and administers all other matters pertaining to the graduate program.
The Master of Gender Studies Degree offers, by full or part-time study, three degree options: thesis, project, or internship.

### 17.2 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission, an applicant will normally hold an Honours Degree or equivalent, and will have a breadth of knowledge in Gender Studies satisfactory to the Graduate Studies Advisory Committee.
2. Applicants who do not have an adequate background in Gender Studies my be required to complete Gender Studies 3005 or Gender Studies 3025 or equivalent normally with a grade of $75 \%$ or higher.

### 17.3 Program of Study

1. Upon admission, each graduate student in the thesis program will be assigned an academic advisor for one year. The supervisory committee, formed prior to the development of the thesis project proposal, will include either one or two supervisors. For students selecting the non-thesis option, one Supervisor will be selected.
2. All students are required to complete Gender Studies 6000, 6100, and 6200.
3. Three to 9 additional elective credit hours approved by the Graduate Studies Advisory Committee and the student's supervisor(s) will be required. These elective credit hours will comprise courses selected from graduate courses in cognate academic units, and/or

Gender Studies 6300 and/or from the block of special topics courses in Gender Studies 6400-6420.
4. Each student will be required to give a public seminar on the student's thesis research, project, or internship after the thesis proposal has been approved and before submission of the student's final thesis/project/internship report.

### 17.4 Thesis

1. Students for the Degree of Master of Gender Studies (thesis option) will be required to complete a minimum of 15 credit hours. Students will also be required to complete a thesis.
2. A thesis proposal, approved by the student's supervisors, will be presented to the Graduate Studies Advisory Committee for its approval. The thesis proposal must normally be approved by the Graduate Studies Advisory Committee no later than the end of the student's third semester in the program.
3. The thesis will be evaluated in accordance with the procedures outlined in General Regulation Theses and Reports of the School of Graduate Studies.

### 17.5 Project

1. Students for the Degree of Master of Gender Studies (project option) will be required to complete a minimum of 18 credit hours. Students will also be required to complete a project.
2. The Master's project must be interdisciplinary in nature and aimed at linking theoretical and practical knowledge by recognizing and articulating a problem relevant to Gender Studies and by developing and justifying theoretical and practical approaches. The project report should consist of the project (e.g., a film or video; a computer project; a website; a manual or guidebook; a kit of learning resources; photographs; audio or videotape, etc.) as well as a literature-based rationale, theoretical basis and justification for its use. The length of the written portion of the project should be $40-60$ pages. Regardless of the form that the project takes (e.g., a film or video) a computer project; a website; a manual or guidebook; a kit of learning resources; photographs; audio or videotape, etc.) there must be a written project report.
3. A project proposal, approved by the student's supervisor, will be presented to the Graduate Studies Advisory Committee for its approval. The project proposal must normally be approved by the Graduate Studies Advisory Committee no later than the end of the student's third semester in the program.
4. The project will be evaluated in accordance with procedures outlined in General Regulation Theses and Reports of the School of Graduate Studies.

### 17.6 Internship

1. Students for the Degree of Master of Gender Studies (internship option) will complete a minimum of 18 credit hours. Students will also be required to complete an internship.
2. Internship placement shall be for one semester. Part-time internships of two semesters will require approval from the proposed agency or institution and the Graduate Studies Advisory Committee.
3. Students, in consultation with their supervisor and the Gender Studies Graduate Co-ordinator, will explore internship options and locate an eligible person to provide field instruction during their internship. Although consideration will be given to all factors affecting the location and type of all Gender Studies internships, the final decision regarding internship rests with the Head, Department of Gender Studies and the Dean of Graduate Studies.
4. Factors affecting the type and location of the internship include: the number of immersion hours per week, the extent to which the intern takes up a trainee, supervisory and/or research role, and whether the intern would be working directly or indirectly with clients of the agency or institution.
5. Each internship shall be sûpervised by a Supervisory Committee of at least three members, including the student's supervisor, the field supervisor, and Gender Studies Graduate Co-ordinator or delegate.
6. The Supervisory Committee will meet with the intern and field supervisor at least once during the internship period to make an assessment of the nature and quality of the intern's progress, and to approve any modifications to the internship.
7. The internship proposal, approved by the student's supervisor, will be presented to the Graduate Studies Advisory Committee for its approval. The proposal must normally be approved by the Graduate Studies Advisory Committee no later than the end of the student's third semester in the program.
8. Regardless of the form that the internship takes, there must be a written internship report ( $40-60$ pages). When the student completes the internship report, the student will present the report to the Supervisory Committee in a formal meeting and discussion, after which the Supervisory Committee will recommend to the Dean of Graduate Studies a grade of pass or fail. A student will be permitted to submit an internship report only after the Supervisory Committee has determined that the internship placement has been fully completed:
9. Should the Head, Department of Gender Studies, on the recommendation of the Supervisory Committee, terminate the internship prior to its completion, it may recommend to the Dean of Graduate Studies one of the following:
a. submission of a new internship proposal for a different field setting (once only);
b. selection of the thesis or project option;
c. termination of the student's program.

### 17.7 Courses

6000 Feminist Theory
6100 Feminist Epistemologies and Methodologies
6200 Graduate Seminar in Gender Studies
6300 Feminism as Community
6400-6420 Special Topics in Gender Studies

## 18 Regulations Governing the Degree of Master of Health Ethics

www.mun.ca/sgs/contacts/sgscontacts.php
www.med.mun.ca
The degree of Master of Health Ethics is offered by the Faculty of Medicine, delivering an advanced program of study for students from various academic fields who are interested in a flexible graduate degree designed to prepare them for a career in ethics within health
care organizations or, for those students completing the research option, further study in health ethics at the Ph.D. level.
The General Regulations of the School of Graduate Studies and the regulations outlined below will apply.

### 18.1 Qualifications for Admission

Admission to the Master of Health Ethics is limited and competitive. The regulations and procedures for admission are as given under the General Regulations of the School of Graduate Studies governing Master's degrees. In addition, to be considered for admission applicants must have successfully completed a minimum of one senior level undergraduate course in Philosophy with substantial ethics content.

### 18.2 Program of Study

1. The Master of Health Ethics degree is offered by full or part-time study. Students may choose one of three program options: (1) Thesis option, (2) Non-thesis, Capstone Project option, (3) Non-thesis, Research Papers option. It is anticipated that full-time students will complete the program in four semesters in accordance with Table 1 Master of Health Ethics Recommended Course Sequence for Full-Time Students.
2. The program of study is the responsibility of the Supervisory Committee composed of a Supervisor and at least two other faculty members. It is the responsibility of the Supervisory Committee to meet regularly (at least annually) with the student and to provide guidance at all stages of the student's program. An annual report prepared by the Supervisor and signed by the student and all members of the Committee is required to be submitted to the Assistant Dean of Research and Graduate Studies (Medicine).
3. All students must complete the following course requirements:
a. MED 6800, MED 6801, and MED 6806
b. 3 elective courses ( 9 credit hours) chosen in consultation with the Supervisor. Elective courses may be selected from the elective courses listing below (excluding MED 6820, 6821, 6822, and 6825) or from other courses approved by the Supervisor.
4. In addition, all students must complete a Health Ethics Practicum (MED 6815). The practicum involves acquiring hands-on experience in three distinct areas of health ethics: clinical ethics, research ethics, and health ethics policy. Students must complete a minimum of 40 practicum hours divided as evenly as possible across the three areas.
5. Students must also complete one of the following in accordance with the program option to which they have been admitted:
a. A thesis, submitted in accordance with the General Regulations, Thesis and Reports of the School of Graduate Studies.
b. Three Health Ethics Research Papers (represented as MED 6820). Research topics will be chosen in consultation with, and approved by, the Supervisor. Students must register for the course MED 6820 in every semester during which they are completing one or more of the Research Papers necessary to satisfy this requirement. A grade of NC (No Credit) will be awarded in all semesters prior to the final semester. A grade of ' $B$ ' or better is required in each of the three required Research Papers in order to successfully complete this requirement and receive a grade of 'Pass' in the final semester. Each paper will be evaluated by the supervising faculty member and another faculty member qualified to evaluate the work.
c. A Health Ethics Capstone Project (MED 6825). The Capstone Project is open to students with substantial and relevant experience in health care and/or with the health care system. The student's supervisor must approve whether the student may undertake a capstone project. The capstone project itself will be chosen in consultation with, and approved by, the Supervisor. Students must register for the course MED 6825 in every semester during which they are completing the Capstone Project. A grade of NC (No Credit) will be awarded in all semesters prior to the final semester. The completed Capstone Project will be evaluated by the supervisor in conjunction with two other faculty members who will comprise a supervisory committee for the capstone project.

Table 1 Master of Health Ethics Recommended Course Sequence for Full-Time Students

| Semester |  |
| :--- | :--- |
| Fall | Courses |
| Winter | MED 6806 Introduction to the Canadian Health System <br> MED 6801 Important Cases in Health Ethics <br> Elective Course |
| Spring and Fall | MED 6800 Health Ethics Theory <br> Elective Course <br> Elective Course |

### 18.3 Courses

A selection of the following graduate courses shall be offered to meet the requirements of students, as far as the resources of the Faculty allow.
MED 6800 Health Ethics Theory
MED 6801 Important Cases in Health Ethics
MED 6803 Research Ethics
MED 6804 Public Health Ethics
MED 6806 Introduction to the Canadian Health System
MED 6807-6814 Special Topics in Health Ethics
MED 6815 Health Ethics Practicum
MED 6820 Health Ethics Research Paper
MED 6825 Health Ethics Capstone Project

## 19 Regulations Governing the Degree of Master of Marine Studies and the Graduate Diploma in Marine Studies (Fisheries Resource Management)

www.mun.ca/sgs/contacts/sgscontacts.php
www.mi.mun.ca
The degree of Master of Marine Studies (M.M.S.) is offered in Fisheries Resource Management (FRM) and in Marine Spatial Planning and Management (MSPM). There is also a Graduate Diploma in Marine Studies (Fisheries Resource Management).
Both the Fisheries Resource Management and the Marine Spatial Planning and Management program areas will be administered by Academic Directors appointed by the Vice-President (Marine Institute), together with Academic Advisory Committees.
Academic Advisory Committees for each program area will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). Each of these committees will consist of the Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University. Normally, all appointments will be for a period of three (3) years.
For the Fisheries Resource Management programs, a Technical Advisory Committee consisting of a cross-section of members with professional expertise related to the fishery, will provide regular feedback on program content, instruction, and future direction of the Program.
For the Marine Spatial Planning and Management program, a Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to the ocean/marine sector, will provide regular feedback on program content, instruction, and future direction of the Program.
Members of these Technical Advisory Committees will be appointed by the Dean of Graduate Studies on recommendation of the VicePresident (Marine Institute). The Academic Director will be an ex-officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

### 19.1 Graduate Diploma in Marine Studies (Fisheries Resource Management)

The Graduate Diploma in Marine Studies (Fisheries Resource Management) provides an opportunity for fisheries professionals to enhance their perspective on fishery issues from a variety of disciplines.

### 19.1.1 Admission Requirements

To be considered for admission to the Graduate Diploma in Marine Studies (Fisheries Resource Management), a student must be eligible to register in the Master of Marine Studies program (see Master of Marine Studies (Fisheries Resource Management), Admission Requirements below).

### 19.1.2 Program of Study

The program is offered online and requires successful completion of 18 credit hours of course work:

1. 5 courses ( 15 credit hours) from Core Courses; and
2. 1 elective course ( 3 credit hours) from either Category A or Category B Electives.

### 19.1.3 Evaluation

Students for the Graduate Diploma in Marine Studies (Fisheries Resource Management) must obtain a grade of B or better in all program courses.

### 19.1.4 Courses

Courses required for the Graduate Diploma in Marine Studies (Fisheries Resource Management) must be selected from the Courses section outlined under the Master of Marine Studies (Fisheries Resource Management) program.

### 19.2 Master of Marine Studies (Fisheries Resource Management)

The Master of Marine Studies (Fisheries Resource Management) is a multi-disciplinary program of study that will provide the student with exposure to all dimensions of modern fisheries resource management in an international context. The program is aimed at professionals working in or intending to enter careers in fisheries management. The program is offered online and requires successful completion of either 24 credit hours of course work and a Major Report, or 30 credit hours of course work. Students who have successfully completed the requirements for the Graduate Diploma in Marine Studies (Fisheries Resource Management) may elect to continue their program of study in order to earn the Degree.

### 19.2.1 Admission Requirements

1. Admission to the program is on a competitive basis. To be considered for admission to the program an applicant must normally have an undergraduate degree with a minimum of a high second class standing from an institution recognized by the Senate.
2. In addition, applicants will normally have a demonstrated commitment to fisheries through employment or experience in a sector of the fishery, in a regulatory agency or government department connected to fisheries, in a non-governmental agency, or through selfemployment or consulting activities related to fisheries.
3. In exceptional cases, applicants who have not completed an undergraduate degree may be considered for admission. Preference will be given to those who have at least 10 years of relevant professional experience, and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at
www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.
5. The deadlines for submission of applications for students wishing to enter the program are as follows:

Fall (September) semester: June 15
Winter (January) semester: October 15
Spring (May): semester: February 15
Applications received after listed deadlines will be considered as time and resources permit.

### 19.2.2 Program of Study

1. Students for the Master of Marine Studies (Fisheries Resource Management) shall be required to complete a minimum of either:
a. 24 credit hours of course work plus a Major Report on the Course Work Plus a Major Report Route completed in accordance * with General Regulation, Theses and Reports of the School of Graduate Studies. Course work must include the following course selections from the Courses section below:

- 5 core courses ( 15 credit hours)
- 1 elective course ( 3 credit hours) from Category A Electives
- 1 elective course ( 3 credit hours) from Category B Electives
- 1 elective course ( 3 credit hours) from either Category A or Category B
b. 30 credit hours on the Comprehensive Course Route which must include the following course selections from the Courses section below:
- 5 core courses ( 15 credit hours)
- 2 elective courses ( 6 credit hours) from Category A Electives
- 1 elective course ( 3 credit hours) from Category B Electives
- 2 elective courses ( 6 credit hours) from either Category A or Category B

2. Dependent upon the applicant's academic background, other courses may be required by the Academic Advisory Committee.
3. Transfer of credit for graduate courses completed in other programs at the University or at other institutions recognized by Senate will be considered in accordance with School of Graduate Studies General Regulations, Transfer of Course Credits.

### 19.2.2.1 Course Work Plus a Major Report Route

24 credit hours of course work plus a Major Report completed in accordance with General Regulations, Theses and Reports of the School of Graduate Studies. Course work must include the following course selections from the Courses section below:

1. 5 core courses ( 15 credit hours)
2. 1 elective course ( 3 credit hours) from Category A Electives
3. 1 elective course ( 3 credit hours) from Category B Electives
4. 1 elective course ( 3 credit hours) from either Category A or Category B

### 19.2.2.2 Comprehensive Course Route

30 credit hours on the Comprehensive Course Route which must include the following course selections from the Courses section below:

1. 5 core courses ( 15 credit hours)
2. 2 elective courses ( 6 credit hours) from Category $\mathbf{A}$ Electives
3. 1 elective course ( 3 credit hours) from Category $\boldsymbol{B}$ Electives
4. 2 elective courses ( 6 credit hours) from either Category A or Category B

### 19.2.3 Evaluation

1. Students for the Master's Degree must obtain a grade of $B$ or better in all program courses.
2. Students who have received a grade less than $a B$ in a program course will be permitted to remain in the program, provided the course is retaken and passed with a grade of B or better. Alternatively the student may, on the recommendation of the Academic Advisory Committee, substitute anothergraduate course. Only one such repeat or substitution will be permitted in the program.
3. The Major Report will normally be undertaken towards the end of the program. The topic of the report and a faculty Supervisor will be chosen by the student in consultation with the Academic Advisory Committee. The report provides an opportunity to synthesize an original perspective on a selected fisheries issue through the examination of appropriate literature and other sources of information. Normally the report will be multi-disciplinary in nature and will result in a document equivalent to a publishable periodical journal article or a consultant's report on a particular issue. It will be assessed in accordance with General Regulations, Theses and Reports of the School of Graduate Studies.

### 19.2.4 Courses

### 19.2.4.1 Core Courses

MSTM 6001 Fisheries Ecology (credit may be obtained for only one of MSTM 6001 and the former FRM 6001)
MSTM 6002 Fisheries Resource Assessment Strategies (credit may be obtained for only one of MSTM 6002 and the former FRM 6002)
MSTM 6003 Fisheries Economics (credit may be obtained for only one of MSTM 6003 and the former FRM 6003)
MSTM 6004 Fisheries Policy and Planning (credit may be obtained for only one of MSTM 6004, the former FRM 6004, and the former FRM 6005)
MSTM 6005 Overview of World Fisheries (credit may be obtained for only one of MSTM 6005 and the former FRM 6009)

### 19.2.4.2 Category A Electives

MSTM 6006 Business Management for Fisheries (credit may be obtained for only one of MSTM 6006 and the former FRM 6006)
MSTM 6007 Fisheries Technology
MSTM 6008 Social and Philosophical Issues of Fisheries Management
MSTM 6009 Current Issues for Sustainable Fisheries

## MSTM 6010 Legal Aspects of Fisheries Resource Management

### 19.2.4.3 Category B Electives

MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6033 Quality Systems
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6044 Marine Environment Law and Pollution Control
MSTM 6056 Management for International Development
MSTM 6071 Management of Aquaculture Technology

### 19.3 Master of Marine Studies (Marine Spatial Planning and Management)

The Master of Marine Studies (Marine Spatial Planning and Management) is a multi-disciplinary academic program that provides students with both conceptual/theoretical background and practical applied skills in integrated coastal and ocean management (ICOM) and marine spatial planning (MSP). The program provides a broad level understanding of planning processes and the governance, policy/legislative, ecological, social, cultural and economic elements of coastal and ocean areas complemented by practical and applied skills for stakeholder engagement, project management and utilization of geospatial technology to support planning and management efforts.
Successful completion of the program includes 30 credit hours of course work and an Internship or a Besearch Project.
The program commences in the Fall semester of each year.

### 19.3.1 Admission Requirements

Admission to the program is on a limited and competitive basis.

1. To be considered for admission to the program an applicant will normally possess a relevant second class or better undergraduate degree from a university of recognized standing.
2. Students intending to undertake electives in Decision Support / Geospatial Analysis (Category C) are required to have a background in mathematics, statistics and geographic information systems.
3. In exceptional cases, applicants who have not completed an undergraduate degree may be considered for admission. Preference will be given to those who have at least 10 years of relevant professional experience, and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.
The deadline for submission of applications is March 15.

### 19.3.2 Program of Study

Students in the Master of Marine Studies (Marine Spatial Planning and Management) are required to complete 30 credit hours of course work and an Internship or Research Project. Course work includes 7 core courses: 6 courses (18 credit hours) completed online, 1 intensive hands-on course ( 3 credit hours) offered in a face-to-face environment, as well as 3 elective courses ( 9 credit hours) offered either online or on campus.

### 19.3.2.1 Core Courses

All students must complete the following compulsory core courses:

- MSTM 6011 Introduction to Integrated Coastal and Ocean Management / Marine Spatial Planning
- MSTM 6012 Fundamentals of Geospatial Analysis
- MSTM 6013 Resource/Natural Environment and Ocean Use Characterization
- MSTM 6014 Geospatial Analysis for Marine Spatial Planning (prerequisites: MSTM 6011, 6012, and 6013) (may be offered in accelerated format)
- MSTM 6022 Communication and Conflict Resolution in a Technical Environment
- MSTM 6027 Coastal and Ocean Environmental Policies
- MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments


### 19.3.2.2 Electives

Students will choose one of three options for elective course selection:

- two Category A Electives plus one Category B Elective or
- two Category B Electives plus one Category A Elective or
- two Category C Electives plus one Category A or B Elective

Category A Electives: Natural Environment

- ENVE/ENVS 6001 Earth and Ocean Systems
- MSTM 6001 Fisheries Ecology
- MSTM 6015 Marine Protected Areas
- MSTM 6016 Coastal Geomorphology / Oceanography


## Category B Electives: Human Environment

- MSTM 6008 Social and Philosophical Issues in Sustainable Fisheries
- MSTM 6017 Social and Cultural Aspects of Coastal Communities
- MSTM 6018 Coastal and Ocean Economics

Category C Electives: Decision Support / Geospatial Analysis

- GEOG 6120 Geospatial Modelling and Analysis
- GEOG 6821 Advanced Computer Modelling/Habitat Mapping


### 19.3.2.3 Internship (MSTM 6019) or Research Project

All students must complete an Internship or Research Project. Normally students would be permitted to register for the Internship or * Research Project only after all other course requirements have been met, or during the student's last semester of studies. Evaluation of the Research Project shall be carried out in accordance with General Regulations, Theses and Reports in the School of Graduate Studies.

## 1. Internship Requirements

- Internships are normally proposed by the student and approved by the Academic Director in consultation with the Placement Officer. Internship placements may be local, national or international. Students seeking international internships must consult with the Academic Director early in the first year of their program.
- Internships are for full-time employment hours for the duration of the semester (12 weeks)
- Students must attend a scheduled pre-internship orientation workshop. See Pre-Internship Workshop below
- Each internship placement is supervised and evaluated by the on-site Supervisor assigned by the employer and the Academic Director. The internship shall consist of two components:
- On-Site Student Performance as evaluated by the on-site Supervisor assigned by the employer, in consultation with the Academic Director and Placement Officer.
- An Internship Report graded by the Academic Director in consultation with the on-site Supervisor assigned by the employer.
- Evaluation of the Internship shall result in one of the following final grades: Pass or Fail.
- A student must obtain a Pass in both the On-Site Student Performance and the Internship Report to obtain a final grade of Pass. If a student fails to achieve the internship standards specified above, the student may be required to repeat the internship. An internship may only be repeated once.
- Students who voluntarily withdraw from the internship without prior approval from the Academic Director, or who conduct themselves in such a manner as to cause the host organization and the Placement Officer to terminate the placement, will normally be awarded a grade of Fail in the internship
- Students are not permitted to withdraw from the internship without prior approval of the Academic Director, in consultation with the Placement Officer. The Placement Officer will make a recommendation to the Academic Director who will make the final decision. Permission to withdraw from the internship does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved internship or research project in lieu of the internship dropped.


## 2. Research Project Requirements

- Research projects are normally proposed by the studdent and approved by the Academic Director.
- Students must attend a scheduled pre-research project orientation workshop. See Pre-Research Project Workshop below.
- Evaluation of the Research Project shall be carried out in accordance with General Regulations, Theses and Reports in the School of Graduate Studies.
- Students are not permitted to withdraw from the research project without prior approval of the Academic Director. Permission to withdraw from the research project does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved research project or internship in lieu of the research project dropped.


## 3. Workshops

Students are required to complete one of the following workshops:

- Pre-Internship Workshop

This online workshop reviews the Internship requirements. It aids students in writing resumes and cover letters, discusses interviewing practices and examines student/employer relationships. International internship opportunities and processes for application will be discussed. This workshop is held during the week following the end of the Winter semester.

- Pre-Research Project Workshop

This online workshop reviews the Research Project requirements, aids students in preparing a project concept, proposal and establishing the research project timelines, and provides access to information and resources necessary for approval and completion of the Research Project. This workshop is held during the week following the end of the Winter semester.

### 19.3.3 Advanced Standing

Students who have successfully completed the Marine Institute Advanced Diploma in Integrated Coastal and Ocean Management will be given advanced standing credit for MSTM 6012, 6016, and 6022.

### 19.3.4 Transfer Credits

Up to three relevant elective courses ( 9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.

### 19.3.5 Evaluation

1. Students in the Master of Marine Studies (Marine Spatial Planning and Management) program must obtain a grade of B or better in all program courses.
2. Students who receive a grade of less than B in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or
substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

### 19.3.6 Courses

### 19.3.6.1 Core Courses

- MSTM 6011 Introduction to Integrated Coastal and Ocean Management / Marine Spatial Planning
- MSTM 6012 Fundamentals of Geospatial Analysis
- MSTM 6013 Resource/Natural Environment and Ocean Use Characterization
- MSTM 6014 Geospatial Analysis for Marine Spatial Planning (prerequisites: MSTM 6011, 6012, and 6013)
- MSTM 6022 Communication and Conflict Resolution in a Technical Environment
- MSTM 6027 Coastal and Ocean Environmental Policies
- MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
19.3.6.2 Category A Electives: Natural Environment
- ENVE/ENVS 6001 Earth and Ocean Systems
- MSTM 6001 Fisheries Ecology
- MSTM 6015 Marine Protected Areas
- MSTM 6016 Coastal Geomorphology / Oceanography


### 19.3.6.3 Category B Electives: Human Environment

- MSTM 6008 Social and Philosophical Issues in Sustainable Fisheries
- MSTM 6017 Social and Cultural Aspects of Coastal Communities
- MSTM 6018 Coastal and Ocean Economics


### 19.3.6.4 Category C Electives: Decision Support / Geospatial Analysis

- GEOG 6120 Geospatial Modelling and Analysis
- GEOG 6821 Advanced Computer Modelling/Habitat Mapping


## 20 Regulations Governing the Degree of Master of Maritime Management

www.mun.ca/sgs/contacts/sgscontacts.php www.mi.mun.ca

### 20.1 Administration

The Master of Maritime Management (M.M.M.) program will be administered by an Academic Director appointed by the Vice-President (Marine Institute), together with an Academic Advisory Committee.
An Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). This committee will consist of the Academic Director as Chair, three members from the Marine Institute, one member from the Faculty of Business Administration and one member from another unit of the University. Normally, all appointments will be for a period of three (3) years.
A Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to the maritime sector, will provide regular feedback on program content, instruction, and future direction of the Program. Members of this Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). The Academic Director will be an ex officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

### 20.2 Program

The Master of Maritime Management (M.M.M.) is a comprehensive academic program that provides a broad understanding of the structure and operation of organizations and the factors that influence business decisions in the context of maritime-based organizations. It provides a maritime management focus through the development of knowledge and understanding of the nature of technical operations and the factors that have an impact on their success, as well as the ability to apply these concepts within their organizations
The program is offered online and requires successful completion of either 1) 24 credit hours of course work and a comprehensive project and report ( 6 credit hours), or 2 ) 30 credit hours of course work. Students will typically register on a part-time basis.

### 20.2.1 Admission Requirements

1. Admission to the program is on a competitive basis. To be considered for admission to the program an applicant will normally possess a second class or better undergraduate degree from a university of recognized standing and will normally have:
a. a Memorial University of Newfoundland Bachelor of Maritime Studies or Bachelor of Technology, or a comparable undergraduate degree with appropriate maritime sector and business management course work; and
b. an appropriate technical knowledge and relevant marine sector employment experience.
2. The deadlines for submission of applications for students wishing to enter studies are as follows:

Fall (September) semester: May 15
Winter (January) semester: September 15
Spring (May) semester: January 15
Applications received after listed deadlines will be considered as time and resources permit.
3. In exceptional cases, applicants who have not completed an undergraduate degree, but who meet all other requirements, may be considered for admission. Preference will be given to those who have at least 10 years of relevant professional and managerial experience, and have successfully completed several years of post-secondary studies. Applicants who do not meet normal
admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
b. International English Language Testing System (IELTS) and achieve a score of (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

### 20.2.2 Program of Study

1. Students for the Master of Maritime Management shall be required to complete a minimum of either:
a. Twenty-four credit hours of course work and a major project and report ( 6 credit hours). Course work includes two compulsory core courses ( 6 credit hours), and six elective courses ( 18 credit hours). Students on the project route will complete MSTM 6101 Project in Maritime Management ( 6 credit hours).
i. Core Courses (Two to be completed):

MSTM 6041 Marine Policy
MSTM 6042 Business of Shipping/Transportation of Goods
ii. Elective Courses (Six to be completed: a minimum of one from Category A and three from Category B):

Category A
MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6030 Principles of Management for Engineering Technology Enterprises
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6054 Technology Assessment

## Category B

MSTM 6027 Coastal and Ocean Environmental Policies
MSTM 6043 Marine Law
MSTM 6044 Marine Environment Law and Pollution Control
MSTM 6045 Port Operations and Management
MSTM 6046 Information Systems in the Marine Environment
MSTM 6047 Maritime Security and Event Investigation
MSTM 6048 Emerging Issues in International Marine Transportation
MSTM 6049 Maritime Risk Analysis and Management
MSTM 6050 Maritime Health, Safety, Environment and Quality
MSTM 6051 International Maritime Compliance \& Business Continuity Planning
iii. Project in Maritime Management

MSTM 6101 Project in Maritime Management (6 credit hours)
Students will choose a topic in consultation with the Academic Director and will work independently to carry out an in-depth study of a problem or application within the area of maritime management and fully document and present their findings. Preferably the problem will be directly related to a workplace situation.
b. Thirty credit hours on a course-based route. Course work includes two compulsory core courses ( 6 credit hours), and eight elective courses ( 24 credit hours).
i. Core Courses (Two to be completed):

MSTM 6041 Marine Policy
MSTM 6042 Business of Shipping/Transportation of Goods
ii. Elective Courses (Eight to be completed: a minimum of two from Category A and four from Category B): Category A
MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6030 Principles of Management for Engineering Technology Enterprises
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6054 Technology Assessment
Category B
MSTM 6027 Coastal and Ocean Environmental Policies
MSTM 6043 Marine Lâw
MSTM 6044 Marine Environment Law and Pollution Control
MSTM 6045 Port Operations and Management
MSTM 6046 Information Systems in the Marine Environment
MSTM 6047 Maritime Security and Event Investigation
MSTM 6048 Emerging Issues in International Marine Transportation
MSTM 6049 Maritime Risk Analysis and Management
MSTM 6050 Maritime Health, Safety, Environment and Quality
MSTM 6051 International Maritime Compliance \& Business Continuity Planning
Up to three relevant elective courses ( 9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.

### 20.2.3 Evaluation

1. Students for the Master of Maritime Management degree must obtain a grade of $B$ or better in all program courses.
2. Students who receive a grade of less than B in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

## 21 Regulations Governing the Degree of Master of Music

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/music
The Master of Music (M.Mus.) program provides the environment for accelerated advances in comprehension, skills, and abilities as a performing musician, music pedagogue, or conductor while offering experience in the metier of the contemporary musician. To that end, the School of Music has forged active partnerships with many of the professional music organizations and institutions within the arts community in the greater St. John's region which afford an exceptional range of professional experiences to its graduate students. Included among these partners are the Newfoundland Symphony Orchestra, the Canadian Broadcasting Company, Heritage Canada, the Newfoundland and Labrador Arts Council, and many others. Within the areas of specialization offered for the M.Mus., there is considerable flexibility available to further focus the program to meet specific interests and needs.

### 21.1 Program of Study

The Degree of Master of Music (M.Mus.) is offered by full-time study, normally commencing in the Fall semester. Three areas of specialization are offered:

1. Conducting. Students may focus in choral conducting, instrumental conducting, or a combination of choral and instrumental conducting.
2. Performance. For a complete list of applied areas of study, see the School of Music website at www.mun.ca/music.
3. Performance/Pedagogy. For a complete list of applied areas of study, see the School of Music website at www.mun.ca/music.

The specialization of Ethnomusicology is available through the degrees Master of Arts and Doctor of Philosophy. For further information see the section Regulations Governing the Degree of Master of Arts, Ethnomusicology and the section Regulations Governing the Degree of Doctor of Philosophy, Ethnomusicology, respectively.

### 21.2 Qualifications for Admission

1. Admission to the program is limited and competitive. The application deadline is December 15 for admission to the following Fall semester. Under special circumstances, applicants may be considered for admission to the Winter semester. For further information, contact the School of Music.
2. To be eligible for consideration for admission, applicants shall meet the requirements set out in General Regulations for Admission, Master's Program. Applicants to the M.Mus. will normally hold a Bachelor of Music or equivalent from a recognized university or conservatory. Preference will be given to applicants who hold first class standing in their undergraduate program.
3. In addition to the requirements above, admission is further determined by audition.
a. Auditions for September entry are normally held in late February or early March of each year. Check the School of Music website at www.mun.ca/music for dates and locations.
b. Applicants to the M.Mus. in Performance or Performance/Pedagogy may submit the audition as a professional quality video recording if they are unable to attend the live auditions. The recording must be unedited; live performances are preferred. The audition program should display a range of performance styles and repertoire. Applicants should consult the School of Music website at www.mun.ca/music for details on length of audition and appropriate repertoire.
c. Applicants to the M.Mus. in Conducting should submit professional quality video recordings of their work with a minimum of two different types of ensembles. These video recordings should include both rehearsals and performances.
4. Once they have been admitted, students will be required to complete diagnostic exams in music theory, aural skills. Voice and choral conducting students will also have their knowledge of lyric diction assessed. If weaknesses are identified, students may be required to complete remedial undergraduate course work.

### 21.3 Degree Requirements

1. The Degree of Master of Music is normally completed in two years of full-time study. Comprehensive examinations are not administered. The normal residency period may, in some instances, be reduced through Summer and Intersession study.
2. All students for the M.Mus. must complete at least 31 credit hours. Further courses may be required depending on the background of the individual student.
3. All students must complete:
a. Music Research Methods: Music 6000 (1 credit hour)
b. Music Seminar: Music 6002
c. Career Skills for Musicians: Music 6700
d. Further courses may be required depending on the background of the individual student.
4. Students in Conducting must complete an additional 24 credit hours according to their area of focus:
a. Choral Conducting
i. Choral Conducting: Music 6310, 6311, 7310
ii. Instrumental Conducting: Music 6210
iii. Score Study and Analysis: Music 6100
iv. Choral Repertoire: Music 6007
v. Electives: Six credit hours. With the approval of the School of Music. 3 credit hours may be from related disciplines.
b. Instrumental Conducting
i. Instrumental Conducting: Music 6210, 6211, 7210
ii. Choral Conducting: Music 6310
iii. Score Study and Analysis: Music 6100
iv. Orchestral or Instrumental Ensemble Repertoire: Music 6006 or 6008
v. Electives: Six credit hours. With the approval of the School of Music. 3 credit hours may be from related disciplines.
c. Combined Choral/Instrumental Conducting
i. Instrumental Conducting: Music 6210, 6211
ii. Choral Conducting: Music 6310, 6311
iii. Score Study and Analysis: Music 6100
iv. Ensemble Repertoire: One of Music 6006, 6007, or 6008
v. Electives: Six credit hours. With the approval of the School of Music. 3 credit hours may be from related disciplines.
5. Students in Performance must complete an additional 24 credit hours as follows:
a. Principal Applied Study: Music 645A/B, 745A/B
b. Other Applied Study: 3 credit hours from Music 6500-6506, 646A/B
c. Music Pedagogy: Music 6400 or Music 6600
d. Electives: Six credit hours. With the approval of the School of Music. 3 credit hours may be from related disciplines.
6. Students in Performance/Pedagogy must complete an additional 24 credit hours as follows:
a. Principal Applied Study: Music 647A/B, 747A/B
b. Music Pedagogy: Music 6400 and 6600
c. Pedagogy Internship: Music 6610
d. Electives: 3 credit hours

Master of Music Curriculum Summary Table

| Master of Music | Conducting |  |  | Performance | Performance/ Pedagogy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Research | 6000, 6002 |  |  | 6000,6002 | 6000, 6002 |
| Career Skills | 6700 |  |  | 6700 | 6700 |
| Applied | $\begin{array}{\|l\|} \hline \text { Choral } \\ 6210 \\ 6310 \\ 6311 \\ 7310 \\ \hline \end{array}$ |  <br> Instrumental <br> 6210 <br> 6211 <br> 6310 <br> 7210 | $\begin{aligned} & \text { Combined } \\ & 6210 \\ & 6211 \\ & 6310 \\ & 6311 \\ & \hline \end{aligned}$ | 645A/B 745A/B <br> 3 credit hours chosen from 646A/B, 65006506 | $\begin{aligned} & 647 \mathrm{~A} / \mathrm{B} \\ & 747 \mathrm{~A} / \mathrm{B} \end{aligned}$ |
| Complementary | $\begin{array}{\|l\|l} 6007 \\ 6100 \end{array}$ | $\begin{aligned} & 6006 \text { or } 6008 \\ & 6100 \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { one of } 6006, \\ 6007,6008 \\ 6100 \end{array}$ | $6400 \text { or } 6600$ | 6400, 6600, 6610 |
| Electives | 6 credit hours, of which 3 may be from related disciplines $\|$6 credit hours, of which <br> 3 may be from <br> related disciplines |  |  |  | 3 credit hours |

1. Students must meet all requirements of the General Regulations of the School of Graduate Studies.
2. Students must obtain a grade of at least $65 \%$ in all program courses to receive credit for the course toward their program requirements. Students who fail to receive $65 \%$ or more in a required course must repeat the course. Students who fail to receive $65 \%$ or more in an elective course must either repeat the course or replace it with another program course. Any student who receives a grade of less than $65 \%$ in two courses or in a repeated course will be required to withdraw from the program.
3. In addition, failure to receive a grade of $75 \%$ or higher in any of Music $645 \mathrm{~A} / \mathrm{B}$, Music $745 \mathrm{~A} / \mathrm{B}$, Music $647 \mathrm{~A} / \mathrm{B}$, Music $747 \mathrm{~A} / \mathrm{B}$, Music 6210, Music 6211, Music 6310, Music 6311, Music 7210, or Music 7310 will lead to termination of the student's program.

### 21.5 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the School will allow. All courses are 3 credit hours unless otherwise indicated.
6000 Music Research Methods (1 credit hour)
6002 Graduate Seminar (prerequisite: Music 6000)
6005 Performance Practice
6006 Instrumental Ensemble Repertoire
6007 Choral Repertoire
6008 Orchestral Repertoire
6009 Music Literature
6100 Score Study and Analysis
6210 Instrumental Conducting I
6211 Instrumental Conducting II (prerequisite: Music 6210)
6212 Instrumental Conducting Internship I (1 to 3 credit hours)
6213 Instrumental Conducting Internship II (1 to 3 credit hours)
6310 Choral Conducting I
6311 Choral Conducting II (prerequisite: Music 6310)
6312 Choral Conducting Internship I ( 1 to 3 credit hours)
6313 Choral Conducting Internship II ( 1 to 3 credit hours)
6400 Music Pedagogy
645A/B Principal Applied Study I (6 credit hours)
646A/B Secondary Principal Applied Study (4 credit hours)
647A/B Principal Applied Study I (6 credit hours)

6500 Chamber Music ( 2 credit hours per semester. Maximum: 8 credit hours)
6501 Chamber Music (3 credit hours per semester. Maximum: 12 credit hours)
6502 Opera Performance (2 credit hours)
6503 Opera Performance (3 credit hours)
6504 Chamber Music (1 credit hour per semester. Maximum: 4 credit hours)
6505 Conducted Instrumental Ensemble (1 credit hour per semester. Maximum: 4 credit hours)
6510 Seminar in Performance Issues
6600 Pedagogy Seminar
6610 Pedagogy Internship I
6611 Pedagogy Internship II
6700 Career Skills for Musicians
6701 Music in the Community ( 1 credit hour) (prerequisite: Music 6700)
6702 Music in the Community ( 2 credit hours) (prerequisite: Music 6700)
6703 Music in the Community (3 credit hours) (prerequisite: Music 6700)
6750 Music Industries Internship (2 credit hours)
6751 Music Industries Internship
7002 Research Paper
7010 World Music: Music of Asia and Oceania
7011 World Music: Music of Africa and the Americas
7012 Canadian Musical Traditions
7013 Music and Culture
7017 Folksong
7018 Jazz and Blues: The Roots of Popular Music
7210 Instrumental Conducting III (prerequisite: Music 6211)
7310 Choral Conducting III (prerequisite: Music 6311)
745A/B Principal Applied Study II (6 credit hours) (prerequisite: Music 645B)
747A/B Principal Applied Study II (6 credit hours) (prerequisite: Music 647B)

## Special Topics Courses

6800-6809
6900-6909
7800-7809

## 22 Regulations Governing the Degree of Master of Nursing

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/nursing

### 22.1 Program

1. The responsibility for the administration of all graduate programs shall reside with the Dean of Graduate Studies.
2. Applicants for the program shall be required to apply for admission to the Dean of the School of Graduate Studies and shall be expected to follow the regulations, policies, and practices required of the School, Deadline for receipt of applications should be no later than February 15. If space is available, students who apply after the deadline date may be accepted.
3. The Faculty of Nursing offers a Master of Nursing (M.N.) Program with two options: Practicum and Nurse Practitioner as well as a Graduate Diploma in Nursing (Post Master's Nurse Practitioner).

### 22.2 Qualifications for Admission

1. Applicants to the Master of Nursing program in any of the two options listed above must have a baccalaureate Degree in nursing, or an equivalent from an institution recognized by the University and a knowledge of nursing satisfactory to the Faculty of Nursing.
2. Admission to the program is limited and competitive. To be considered for admission, the applicant must have maintained at least a grade $B$ standing in the baccalaureate program.
3. Applicants are also required to have a minimum of one year of experience ( 1950 hours) in nursing practice for the Practicum Option and two years of experience ( 3000 hours) in nursing practice for the Nurse Practitioner Option and to have completed an undergraduate nursing research course (minimum ' B ' standing) and an undergraduate statistics course (minimum ' B ' standing).
4. Applicants must hold a practising licence from the Association of Registered Nurses of Newfoundland and Labrador or must be currently registered as a practising nurse in another Canadian jurisdiction. Applicants from other countries who do not meet the above criteria will be assessed on an individual basis. However, they must submit proof of registration as a practising nurse (or an equivalency) from their country or jurisdiction.
5. In addition to the above requirements, applicants seeking admission to the MN-Nurse Practitioner Degree option must have two years of clinical experience preferably in their chosen specialty area.
6. In addition to requirements 1. and 4., applicants seeking admission to the Graduate Diploma in Nursing (Post Master's Nurse Practitioner) program must have completed a Master's Degree (minimum ' B ' standing) in Nursing or an equivalent degree with a nursing focus, a graduate level statistics course (minimum ' $B$ ' standing), a graduate level nursing research theories course (minimum 'B'standing), a Bachelor's degree (minimum 'B' standing) in Nursing, and have two years of clinical nursing experience preferably in their chosen specialty area.
7. In addition to requirements 1., 4., and 6. applicants seeking admission to the MN-Nurse Practitioner Degree option and the Graduate Diploma in Nursing (Post Master's Nurse Practitioner) program will note that preference will be given to applicants who are living and working as Registered Nurses in Newfoundland and Labrador.
8. Only in exceptional circumstances and only on the recommendation of the Faculty of Nursing shall the Dean of Graduate Studies consider applicants who do not meet admission requirements listed above.

### 22.3 Registration

See School of Graduate Studies General Regulations, Registration.

### 22.4 Programs of Study

There are two routes offered that lead to a Master of Nursing Degree: the Practicum Option and the Nurse Practitioner Option. Normally the program will require two years to complete when taken on a full-time basis. In addition to the M.N. Degree program, the Faculty of Nursing also offers a Graduate Diploma in Nursing (Post Master's Nurse Practitioner).

### 22.4.1 Practicum Option

1. Students must complete an approved program of study consisting of a minimum of 24 credit hours in graduate program courses and 6 credit hours in practicum courses.

## Required courses:

6010 Research in Nursing: Quantitative Methods
6011 Philosophical and Theoretical Foundations of Nursing
6012 Statistics for Advanced Nursing Practice
6100 Research in Nursing: Qualitative Methods
6221 Population-based Nursing (equivalent to N6220 and N6230)
6240 Nursing Individuals and Families Through Life Transitions (equivalent to N6200 and N6210)
6250 Foundations for Advanced Nursing Practice
One of the following courses:
6020 Program Development in Nursing
6031 Education in Nursing
The following practicum courses:
6660 MN Practicum 1
6661 MN Practicum 2
2. The program of each student shall be approved by the Dean of Graduate Studies on the recommendation of the Dean of the Faculty of Nursing.

### 22.4.2 Nurse Practitioner Option



1. Students must complete an approved program of studies consisting of a minimum of 37 credit hours in graduate program courses and an integrated clinical practice experience, comprising 12 credit hours.

## Required courses:

6010 Research in Nursing: Quantitative Methods
6011 Philosophical and Theoretical Foundations of Nursing
6012 Statistics for Advanced Nursing Practice
6100 Research in Nursing: Qualitative Methods
6221 Population-Based Nursing (equivalent to 6220 and 6230)
6240 Nursing Individuals and Families Through Life Transitions (equivalent to 6200 and 6210)
6251 Writing Skills for Nurse Practitioners (1 credit hour) (Students who have transferred from the practicum option and have credit for 6250 Foundations for Nursing Practice will have this course waived)
6703 Advanced Health Assessment and Clinical Practicum 1 ( 4 credit hours)
6704 Applied Pathophysiology and Clinical Practicum 2 ( 4 credit hours)
6705 Pharmacotherapy and Therapeutics
6706 Nurse Practitioner Roles and Practice Issues
Either one of: 6800 Adult Advanced Clinical Decision Making 3 ( 4 credit hours), (or the former 6900 Adult Advanced Clinical Decision Making ( 4 credit hours)), 6802 Family/All Ages Clinical Decision Making 3 ( 4 credit hours), (or the former 6802 Family/All Ages Clinical Decision Making ( 4 credit hours)), or, one of: 6803 to 6809 Nursing Specialty Option Courses ( 4 credit hours)
690X Advanced Clinical Practicum 4 (The Integrated practice component will normally consist of a minimum of 400 hours of preceptored specialty clinical practice and biweekly seminars) (12 credit hours), (or the former 690X 2). The integrated practice component will normally consist of a minimum of 400 hours of preceptored specialty clinical practice and biweekly seminars) (12 credit hours)).
2. The program of each student shall be approved by the Dean of Graduate Studies on the recommendation of the Dean of the Faculty of Nursing.
3. The maximum time frame from commencement of the first core NP course until program completion shall normally be no longer than 3 years.
4. Students must complete the required clinical hours per course in order to progress in the program and they must complete the required clinical hours for each life stage (for example, children, pregnancy, older adult) by the end of 690X in order to complete the Nurse Practitioner Option.
5. Students must complete the required clinical hours per course in order to progress in the program and they must complete the required clinical hours for each life stage (for example, children, pregnancy, older adult) by the end or 690X in order to complete the Nurse Practitioner Option.

### 22.4.3 Graduate Diploma in Nursing (Post Master's Nurse Practitioner)

1. Students with a Master's Degree in Nursing or an equivalent Degree with a nursing focus must complete an approved program of study consisting of a minimum of 18 credit hours in graduate program courses and integrated clinical practice experience, comprising 12 credit hours.

## Required courses:

6703 Advanced Health Assessment and Clinical Practicum 1 (4 credit hours)
6704 Applied Pathophysiology and Clinical Practicum 2 ( 4 credit hours)
6705 Pharmacotherapy and Therapeutics
6706 Nurse Practitioner Roles and Practice Issues
Either one of: 6800 Adult Advanced Clinical Decision Making 3 ( 4 credit hours), (or the former 6800 Adult Advanced Clinical Decision Making ( 4 credit hours)), 6802 Family/All Ages Clinical Decision Making 3 ( 4 credit hours), (or the former 6802 Family/All Ages Clinical Decision Making ( 4 credit hours)), or, one of: 6803 to 6809 Nursing Specialty Option Courses ( 4 credit hours)
690X Advanced Clinical Practicum 4 (The integrated practice component will normally consist of a minimum of 400 hours of preceptored specialty clinical practice and biweekly seminars).
2. Programs for some students may exceed the above minimum requirements.
3. The program for each student shall be approved by the Dean of Graduate Studies on the recommendation of the Dean of the Faculty of Nursing.
4. The maximum time frame from commencement of the first core NP course until program completion shall normally be no longer than 3 years.
5. Students must complete the required clinical hours per course in order to progress In the program and they must complete the required clinical hours for each life stage (for example, children, pregnancy, older adult) by the end of 690X in order to complete the Nurse Practitioner Option.

### 22.5 Evaluation

1. In order to continue in graduate studies and in order to qualify for a Master's Degree, a student shall obtain an A or B grade in each program course and in both practicum courses.
2. When the Dean of the Faculty of Nursing has determined on the basis of consultation with the student, the Associate Dean, Graduate Programs, and the thesis or practicum Supervisor, that a student has fallen below a satisfactory level, the Dean of the Faculty of Nursing may recommend to the Dean of Graduate Studies that the student be required to withdraw from the program.

### 22.6 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Faculty of Nursing will allow.
6010 Research in Nursing: Quantitative Methods (3 credit hours)
6011 Philosophical and Theoretical Foundations of Nursing
6012 Statistics for Advanced Nursing Practice
6020 Program Development in Nursing
6031 Education in Nursing
6100 Research in Nursing: Qualitative Methods (pre or co-requisite: 6011)
6221 Population-Based Nursing (equivalent to 6220 and 6230)
6240 Nursing Individuals and Families Through Life Transitions (equivalent to 6200 and 6210 )
6250 Foundations for Advanced Nursing Practice (This course is a prerequisite for all other courses for students in the practicum option though may be taken as a co-requisite in the first term of the program)
6251 Writing Skills for Nurse Practitioners (1 credit hour) (This course is a prerequisite for all other courses for students in the MN-NP option though may be taken as a co-requisite in the first term of the program)
6310-6350 Special Topics in Nursing
6501-6510 Individual Readings and Research in Special Areas
6660 MN Practicum 1 (prerequisites: All required courses including 6020 or 6031, and 6240/6221 or 6200/6210 or 6220/6230)
6661 MN Practicum 2 (prerequisite: 6660 MN Practicum 1)
6703 Advanced Health Assessment and Clinical Practicum 1 ( 4 credit hours)
6704 Applied Pathophysiology and Clinical Practicum 2 (4 credit hours) (prerequisite: 6703)
6705 Pharmacotherapy and Therapeutics (prerequisite: 6704)
6706 Nurse Practitioner Roles and Practice Issues
6800 Adult Advanced Clinical Decision Making 3 ( 4 credit hours), (or the former 6800 Adult Advanced Clinical Decision Making (4 credit hours)) (prerequisites: 6705 and 6706)
6802 Family/All Ages Clinical Decision Making 3 ( 4 credit hours), (or the former 6802 Family/All Ages Clinical Decision Making (4 credit hours)) One of: 6803 to 6809 Nursing Option Courses ( 4 credit hours) (prerequisites: 6705 and 6706)
690X Advanced Clinical Practicum 4 (The integrated practice component will normally consist of a minimum of 400 hours of preceptored clinical practice and biweekly seminars) (12 credit hours), (or the former 690X Advanced Clinical Practicum 2 (The integrated practice component will normally consist of a minimum of 400 hours of preceptored clinical practice and biweekly seminars) (12 credit hours) (prerequisite: 6800 or 6802)

## 23 Regulations Governing the Degree of Master of Occupational Health and Safety

www.mun.ca/sgs/contacts/sgscontacts.php
The Master of Occupational Health and Safety is an interdisciplinary program providing advanced-level study of multiple aspects of occupational health and safety (OHS). The course offerings will cover a wide range of OHS issues seen from a broadly interdisciplinary perspective, with a focus on the history and social science of OHS, workplace organization, epidemiology, treatment and prevention of occupational injuries and diseases, ergonomics, and occupational hygiene.
The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 23.1 Administration

1. The program shall be administered by a Director, who reports to the Dean of Graduate Studies. The Director shall be appointed by the Dean of Graduate Studies after consultation with the deans of appropriate academic units and with the community of occupational health and safety researchers and stakeholders both within and outside the University.
2. An Administrative Committee shall be appointed by The Dean of Graduate Studies consisting of the Director, faculty members with an interest in Occupational Health and Safety from at least four of the following academic units - Business Administration, Engineering and Applied Science, Human Kinetics and Recreation, Humanities and Social Sciences, Medicine, and Nursing. It will be chaired by the Director and will review academic, administrative, resource, and strategic planning issues related to the program.
3. A Community Advisory Board in Occupational Health and Safety shall be established for the purpose of obtaining feedback on the program. The Board will consist of a broad cross-section of members from the occupational health and safety community both within and outside the University who shall be appointed by the Dean of Graduate Studies on the recommendation of the Director. The Advisory Board will be chaired by the Dean of Graduate Studies or delegate.

### 23.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission to the program, an applicant shall meet the requirements set out in the School of Graduate Studies General Regulation, Qualification for Admission.
3. In exceptional cases, applicants who have not completed an undergraduate degree, but who meet all other requirements, may be considered for admission. Preference will be given to those who have a minimum of 10 years of full-time professional experience in the field of occupational health and safety and who have successfully completed substantial university coursework including at least two courses at an advanced undergraduate level from an institution recognized by Senate.
4. Applicants who did not complete their Bachelor's degree at a recognized university where English is the primary language of instruction must normally complete either the Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or the International English Language Testing System (IELTS) and achieve a score of 7 (or higher). Admission will be limited to the best applicants based on prior academic performance, work experience, and letters of recommendation.

### 23.3 Program of Study

The Master of Occupational Health and Safety is offered through either full-time or part-time study. The program requires that:

1. a student must complete 24 credit hours of coursework, including the completion of a capstone research paper in OHS 6001 . Students must complete 9 credit hours from the list of Required Courses, 9 credit hours from the list of Elective A Courses, and 6 credit hours from the list of Elective B Courses. Elective A Courses may be substituted for any Elective B Courses. Other elective courses may be approved and added from time to time by the Dean; and
2. each student's program of study must be approved by the Administrative Committee and the Dean of Graduate Studies. Students registered on a full-time basis will normally complete the program in three academic semesters. Students registered on a part-time basis will normally complete the program in no more than nine academic semesters.

## Required Courses ( 9 credit hours)

OHS 600A/B Research Seminar in OHS
OHS 6001 Supervised Capstone Research Paper
One of the following graduate-level research methods courses:
Education 6467 Quantitative Research Methods
Employment Relations 6010 Quantitative Methods
Employment Relations 6020 Qualitative Methods
Medicine 6280 Community Health Research Methods
Psychology 6400 Theory and Methods in Social Psychology
Sociology 6040 Advanced Quantitative Methods
Sociology 6041 Advanced Qualitative Methods
With the approval of the Dean, and upon recommendation of the Administrative Committee, another research methods course may be deemed acceptable, including an advanced methods course (such as Medicine 6294) for which the student has already taken the prerequisite basic graduate course (such as Medicine 6280).
Elective A Courses (9 credit hours)
Human Kinetics and Recreation 6340 Occupational Biomechanics
Human Kinetics and Recreation 6350 Human Error in Complex Work Systems
OHS 6002 Occupational Diseases and Injüries
OHS 6003 Regulatory Approaches and Compensation Systems
Sociology 6090 Social Science of Occupational Health and Safety
Sociology 6360 Sociology of Work
Elective B Courses ( 6 credit hours)
Anthropology 6071 Health and Illness - Cultural Contexts and Constructions
Business 8104 Organizations Behaviour and Structure
Business 8204 Human Resource Management
Business 8210 Labour Relations
Engineering 9115 Safety and Risk Engineering
History 6075 Advanced Studies in Labour and Working-Class History
Human Kinetics and Recreation 6360 Knowledge Translation in Ergonomics and OHS
Medicine 6220 Introduction to Community Health
Medicine 6270 Epidemiology I
Medicine 6282 Canadian Health Care System
Medicine 6722 Environmental Health
Nursing 6221 Population-Based Nursing
With the approval of the Dean upon recommendation of the Administrative Committee, Elective B courses may be substituted for Elective A courses.

### 23.4 Advanced Standing

Graduates of the College of the North Atlantic's Safety Engineering Program, or of a similar approved program elsewhere, may receive advanced standing for the equivalent of 6 credit hours of elective $B$ courses to be apportioned at the discretion of the Dean upon the recommendation of the Administrative Committee.

### 23.5 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the program will allow:
OHS 6000 Research Seminar in OHS
OHS 6001 Supervised Capstone Research Paper
OHS 6002 Occupational Diseases and Injuries
OHS 6003 Regulatory Approaches and Compensation Systems

## 24 Regulations Governing the Degree of Master of Philosophy

www.mun.ca/sgs/contacts/sgscontacts.php

## www.mun.ca/hss

Programs leading to the Degree of Master of Philosophy (M.Phil.) are offered at present in German Language and Literature, and in the Humanities. The degree of M.Phil. in the Humanities is administered by the Director of Studies and is in all respects separate from the M.Phil. in German Language and Literature.

### 24.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission an applicant shall hold a Bachelor's Degree or its equivalent from an institution recognized by the Senate and shall have a knowledge of the applicant's proposed field of specialization satisfactory to the relevant Department (and to the Director of Studies in the case of the program in Humanities), and to the Dean.
2. Preference will normally be given to applicants who hold an appropriate Honours Degree either from Memorial University of Newfoundland, or from another university whose Honours Degree is of comparable standing. Any other applicant who holds a Bachelor's Degree or its equivalent will be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least grade B in courses in the proposed field of specialization;
b. the applicant's overall undergraduate record after the first year shows an average of at least grade B in all courses taken; and
c. the Department (and Director of Studies in the case of the program in Humanities) satisfies the Dean that the applicant's work exhibits evidence of academic excellence.
Only in exceptional circumstances, and only on the recommendation of the relevant Department (and Director of Studies in the case of the program in Humanities) or the Board of Studies, will the Dean consider applicants who do not meet the requirements a. and $b$. Such applicants, however, must meet the requirement c.
3. An applicant may be required to demonstrate a satisfactory knowledge of the proposed field of study in an examination administered by the relevant Department (and Director of Studies in the case of the program in Humanities).
4. Applicants whose mother tongue is not English are reminded that a high degree of literacy in English is required of students at the University. In most cases instruction is in English, and examinations are to be written in English. (Language departments, however, give instruction in the pertinent language and often require examinations to be written in that language. In addition, other departments may permit and even require examinations to be written in a language other than English).
5. An applicant may be required to pass a qualifying examination

Note: Some Departments have particular regulations in addition to these, and applicants are advised to turn to the relevant parts of this Calendar and acquaint themselves with both the General Regulations and the regulations of the program in which they are interested.

### 24.2 Program of Study

1. Every student shall read at least 30 credit hours in program courses in one subject or in a combination of closely related subjects as recommended by the relevant Department (and Director of Studies in the case of the program in Humanities), and approved by the Dean.
2. A student may be required also to take additional credit hours in program courses, which must be recommended by the relevant Department (and Director of Studies in the case of the program in Humanities), and approved by the Dean.
3. Students registered in the program in Humanities will be required to maintain and submit for evaluation a program Journal (see Program of Study, 3. of the Regulations for the Degree of Master of Philosophy in Humanities).
4. No student while classified as a part-time student may take more than 6 credit hours in any one semester.
5. No student may take more than 9 credit hours in graduate courses in a single semester, nor any credit hours in undergraduate courses at the same time as 9 credit hours in graduate courses; in no case may graduate and undergraduate credit hours combined exceed 12 in any one semester.
6. The course program will culminate in a general comprehensive examination (see Evaluation - General Comprehensive Examination below).
7. Every student shall be assigned to a tutor recommended by the relevant Department (and Director of Studies in the case of the program in Humanities), and approved by the Dean.
8. The Dean may approve an application to transfer from the M.Phil. to the M.A. or M.G.S. only when a new integrated program, acceptable to the Dean, is submitted.

### 24.3 Perioo of Study

The period of study for the Master of Philosophy Degree shall not normally exceed three years, during which time the student shall spend at least two semesters in full-time attendance as a graduate student at this University.

### 24.4 Evaluation

## See also Evaluation under General Regulations.

1. Students registered in undergraduate courses shall satisfy examination requirements in these courses.
2. The academic requirements for the Degree of Master of Philosophy shall be met when the student has successfully completed all course requirements of the program and has passed a general examination which consists of both written and oral parts. The Dean, on the recommendation of the relevant Department (and Director of Studies in the case of the program in Humanities), shall determine the times and places for general examinations; and, on the recommendation of the relevant Department (and Director of Studies in the case of the program in Humanities), shall appoint examiners, one of whom shall be from outside the Department(s) concerned. In the M.Phil. in Humanities, a program Journal is also required.

### 24.5 Evaluation - General Comprehensive Examination

1. Each student must pass a general comprehensive examination.
2. The examination committee shall be appointed by the Dean on the recommendation of the relevant Department (and Director of Studies in the case of the program in Humanities). The committee shall consist of either three or five members, at least one of whom
must come from outside the Department(s) concerned. The student shall be informed of the names of the committee well before the examination.
3. The student and the tutor will normally agree when the student may sit the general comprehensive examination. However, the relevant Department (and Director of Studies in the case of the program in Humanities) must accede to the student's request to sit a comprehensive examination, except that in no circumstances may a student attempt the general comprehensive examination before the student's course program is completed.
4. The schedule for the examination shall be agreed by the student, the tutor, and the examining committee, and shall be communicated by the Dean.
5. The examination shall consist of a written part and an oral part. The time between the written and the oral parts shall normally be from one to four weeks.
6. The oral examination shall be from one to three hours in length, and shall be conducted by the examining committee, and shall be open only to the examination committee and to members of the relevant Department (and Director of Studies in the case of the program in Humanities).
7. A student must satisfy the examining committee in both parts of the examination to obtain a pass.
8. The successful completion of the comprehensive examination is the final academic requirement for the Master of Philosophy Degree.

### 24.6 Departmental Regulations

Every student in a graduate program shall comply with any additional program requirements and with the General Regulations.

### 24.7 German

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/languages

### 24.7.1 Program of Study

The degrees of Master of Arts and Master of Philosophy are offered in German Language and Literature and may be taken by full-time or part-time study.

1. In addition to the general requirements, students will be expected to have acquired a superior knowledge of the spoken and written language and may, depending on their academic background and field of specialization, be asked to take advanced undergraduate courses.
2. All students will complete at least 15 credit hours and a thesis for the M.A. and at least 30 credit hours for the M.Phil., and the entire program of study and research will normally be of two-years' duration.

### 24.7.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Topics in Modern Technology, Literature and Culture
6001 The Other in German-language Literature and Culture
6100 Topics in the History of the German Language
6103 Bibliography and Research Methods
6200 Issues in Early German Literature and Culture I
6201 Topics in Early German Literature and Culture II
6300 Topics in Early Modern German Literature and Culture I
6301 Topics in Early Modern German Literature and Culture II
6800 Topics in Modern German Literature and Culture I
6801 Topics in Modern German Literature and Culture II
6900 Topics in Contemporary German Literature and Culture I
6901 Topics in Contemporary German Literature and Culture II
6903 Propaganda and Censorship
7000 Special Subject or Author I
7001 Special Subject or Author II
7002-7020 Special Topics in German Studies

### 24.8 Humanities

www.mun.ca/sgs/contacts/sgscontacts.php
The Master of Philosophy in Humanities has been designed for students from any discipline. It is directed to students who hold an Honours bachelor's Degree or its equivalent. The object of the M.Phil. in Humanities program is to provide students with an opportunity to see the historical and logical context of their own disciplinary points of view. The program is based on the interaction of a group of students of varying backgrounds and interests studying a common core of texts in a shared set of courses.
The program draws scholarly participation from faculty members in a range of academic disciplines within the School of Graduate Studies. The program is administered by a Director of Studies located within the Department of Gender Studies.

## Master of Philosophy

In addition to meeting these regulations students musts also meet the General Regulations Governing the Degree of Master of Philosophy.
This program is administered by a Director of Studies on behalf of the Faculty of Humanities and Social Sciences, and will draw scholarly participation chosen from those appropriately qualified faculty members wishing to participate, regardless of Department or Faculty affiliation

### 24.8.1 Qualifications for Admission

1. Admission is limited and competitive. The number of students admitted to the program will be strictly limited to ensure small classes and maximum student-faculty contact. To be considered for admission an applicant will normally hold an Honours Bachelor's Degree (or equivalent) from an institution recognized by the Senate, and will have a breadth of knowledge in one or more of the Humanities
disciplines satisfactory to the Director of Studies, and to the Dean.
2. Applicants who do not hold an Honours Degree (or equivalent) will be required to complete, prior to admission, a number of undergraduate courses, the nature and number of which will be determined on the basis of the applicants' undergraduate record by the Director of Studies. Students will be required to complete such designated pre-admission courses with a minimum overall average of $70 \%$.

### 24.8.2 Administration

1. The program will be administered by the Director of Studies.
2. There will be a Director of Studies who will make recommendations to the Dean concerning admission, financial support for students, and all other matters pertaining to the program.
3. Responsibility for the allocation of teaching and the support of related research will be managed by agreement between the Deans of the appropriate Faculties, the Heads of Departments of participating faculty members, and the Director of Studies, in consultation with the Dean of Graduate Studies.

### 24.8.3 Program of Study

1. Every student shall normally read 18 credit hours in the 6 regulation courses listed below.
2. With permission of the Director of Studies, a student may elect to substitute up to two of these courses with courses from other graduate programs in this University. Attendance in other programs requires the permission of the departments involved. (See also School of Graduate Studies General Regulation Program Requirements, Transfer of Course Credits which allows for further transfer of credits already taken but not yet applied to a graduate degree.)
3. Every student shall be required to maintain and submit a program Journal which will be monitored and evaluated by the Director of Studies. The Journal will comprise the student's critical reflections arising out of analyses of designated key themes common to the several disciplines which constitute the program.

### 24.8.4 Comprehensive Examination

1. Each student must pass a general comprehensive examination.
2. The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Director of Studies. The Committee shall normally consist of three members. One member of the Committee is normally the tutor. The student shall be informed of the names of the committee well before the examination.
3. The student and the tutor will normally agree when the student may sit the general comprehensive examination. However, the Director of Studies must accede to the student's request to sit a comprehensive examination, except that in no circumstances may a student attempt the general comprehensive examination before the student's course program is completed.
4. The schedule for the examination shall be agreed by the student, the tutor, and the Examining Committee, and shall be communicated by the Dean.
5. The examination shall consist of a written part and an oral part. The time between the written and the oral parts shall normally be from one to four weeks.
6. The program journal is an extended paper or series of linked papers which analyses and reflects critically on issues encountered by the student during the course of the program. Papers and/or projects completed during courses may be incorporated into the program journal, but shall not, of themselves, constitute the entire journal.
7. The oral examination shall be from one to three hours in length, shall be conducted by the Examining Committee, and shall be open only to the Examination Committee, and members of the Departments concerned. The oral examination shall be chaired by the Director of Studies.
8. A student must satisfy the Examining Committee in both parts of the examination to obtain a pass.
9. The successful completion of the comprehensive examination is the final academic requirement for the Master of Philosophy Degree.

### 24.8.5 Courses

6000 Speaking and Writing I
6010 Readings in History I
6015 Historical Contexts and Modern Users/Viewers (Harlow, England)
6020 Readings in Western Literature I
6030 Readings in Philosophy I
6040 Readings in Science and Technology
6041 Seminar in Humanities

## 25 Regulations Governing the Degree of Master of Physical Education

www.mun.ca/sgs/contacts/sgscontacts.php

## www.mun.ca/hkr

The Degree of Master of Physical Education (M.P.E.) is offered by full-time and part-time study. Part-time study is available through Internet-based distance education technology.

### 25.1 Qualifications for Admission

1. Admission is limited and competitive. The deadline for receipt of applications is April 1 for admission into the subsequent Fall semester. To be considered for admission an applicant shall normally hold a Bachelor's Degree in Physical Education, Recreation and Leisure Studies, or a related discipline, with at least second class standing, from an institution recognized by Senate. In addition to the above, preference will be given to applicants with at least two years of work experience, obtained either through Cooperative Education programs or through employment deemed appropriate.
2. Any other applicant who holds a Bachelor of Physical Education or Recreation and Leisure Studies Degree or its equivalent may be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least grade $B$ in physical education and/or recreation and leisure studies courses, or
b. the applicant has raised the overall academic standing to second class following the completion of the undergraduate degree, through the successful completion of an approved pattern of undergraduate courses.
3. Only in exceptional circumstances and only on the recommendation of the School of Human Kinetics and Recreation shall the Dean of Graduate Studies consider applicants who do not meet these admission requirements.

### 25.2 Program of Study and Research

1. The Degree of Master of Physical Education is offered under two options:

Option 1. The program shall consist of a minimum of 12 credit hours in graduate courses plus a thesis. The thesis shall be on an approved subject in which systematic research has been conducted by the student under the direction of the Supervisor.
Option 2. The program shall consist of a minimum of 24 credit hours in graduate courses plus a comprehensive examination in the student's major area of study.
2. The student's major area of study shall be Administration, Curriculum, and Supervision in Physical Education.

In conjunction and collaboration with other Faculties and Schools of Memorial University of Newfoundland, students may pursue their special interests through an interdisciplinary course of study. The student's interests may be accommodated through individual reading and research in these special areas.
3. The required courses for the degree shall normally include:

Option 1:Students for the Master of Physical Education (Option 1) shall be required to complete a minimum of 12 credit hours plus a thesis. Either HKR 6000 or HKR 6001 is normally required for all students. In addition, all on-campus students shall be required to complete four semester-length seminars represented by registration and successful completion of HKR 6314 (a non-credit, repeatable course) in each of four semesters during their tenure in the program. Off-campus or part-time students who cannot attend the on-campus seminar series meet with the course instructor to discuss alternate evaluation. The remaining course requirements will be selected, in agreement with the Supervisory Committee, to reflect the student's area of research interests.
It is the responsibility of the student to arrange regular meetings with their supervisory committee. An annual report, prepared by the student and signed by the Supervisor and all members of the Supervisory Committee, is submitted to the Dean of the School of Human Kinetics and Recreation (or delegate) as required by the School of Graduate Studies.
A student completing a Master of Physical Education will be required to present a thesis proposal for the studdent's proposed thesis normally by the end of the third semester of study. The thesis proposal shall normally consist of a full written proposal (including literature review) submitted to the Supervisory Committee. A summary of the proposal is to be distributed to graduate students and faculty one week prior to the scheduled presentation. The student may be questioned on the student's proposal by the Supervisory Committee and seminar audience. Any deficiencies noted during the presentation should be carefully considered by the student and the Supervisory Committee prior to proceeding with the thesis.
Evaluation of the thesis shall be governed by School of Graduate Studies General Regulations, Theses and Reports. The thesis shall normally be evaluated by two examiners approved by the Dean.
When the thesis or project report has been completed to the satisfaction of the Dean, the Dean shall recommend that the student be awarded the degree.
Option 2: HKR 6500 plus 21 credit hours in HKR courses (plus comprehensive examination).
Equivalent courses may be substituted from other Faculties or Schools subject to the approval of the School of Human Kinetics and Recreation Graduate Studies Committee.

### 25.3 Evaluation

1. Students must obtain an A or B grade in each program course. In accordance with General Regulation Evaluation, Evaluation of Graduate Students only one course may be repeated.
2. When the Dean has determined, on the basis of consultation with the student and the instructors, that a student's work has fallen below a satisfactory level, the Dean may recommend to the Dean of Graduate Studies that the student be required to withdraw from the program.

### 25.4 Comprehensive Examinations

1. Students electing to qualify for the Degree under Option 2 must write a comprehensive examination. The comprehensive examination shall examine the student's ability to integrate and apply material from all course work completed during study for the Degree. The student may be required to appear for an oral examination.
2. The comprehensive examination shall normally be constructed and evaluated by an examining committee of three examiners, at least two of whom shall be faculty members of the School of Human Kinetics and Recreation appointed by the Dean on the recommendation of the Dean of the School.
3. A student may not write the examination before completing the course work for the Degree.

Note: Every student in graduate studies shall comply with the General Regulations, the Degree Regulations and any additional requirements of the Department.

### 25.5 Courses

6000 Quantitative Research Methods
6001 Qualitative Research Methods
6002 Scientific and Cultural Foundations of Physical Education
6003 Physical Education, Culture and Society
6110 Physical Education, Recreation and Sport Management
6111 Canadian Delivery Systems in Physical Education, Recreation and Sport
6120 Curriculum Development in Physical Education
6121 Physical Education Leadership
6122 Comprehensive School Health
6123 Coaching and Long-term Athlete Development in the Education System
6124 Adapted Physical Activity
6125 Evaluation and Testing in Physical Education
6130 Computer Applications for Physical Activity Measurement and Intervention
6314 Graduate Seminar Series (repeatable, non-credit)

6410 Sport and Society
6420 History of Physical Education and Sport
6500 Introduction to Research in Physical Education
6600 Contemporary Issues and Trends in Physical Education
6610-15 Individual Reading and Research in Special Areas
6700-6709 Individual Reading and Research in Special Areas of Physical Education

## 26 Regulations Governing the Degree of Master of Public Health

www.mun.ca/sgs/contacts/sgscontacts.php
www.med.mun.ca
The degree of Master of Public Health (M.P.H.) is offered by the Faculty of Medicine, with specializations in Population and Public Health and Nutrition and Dietetics.
The Population and Public Health specialization delivers an advanced program of study for students from various academic fields who are interested in a professional degree that will prepare them for practical work in a variety of public health practice settings. The program is available for full-time and part-time study noting that full-time attendance is required during the Public Health Practicum (or Public Health Capstone Research Project) portion of the program. It is anticipated that full-time students will complete the program in 12 months in accordance with Table 1 Master of Public Health Recommended Course Sequence for Full-Time Students in the Population and Public Health Specialization.
The Nutrition and Dietetics specialization provides a research enriched program of study for full-time students who wish to pursue a career in dietetics or community nutrition. This specialization offers an opportunity for advanced academic study in the field of public health. Upon completion of the program, which includes a dietetics internship, students will be eligible to write the qualifying exam of Dietitians of Canada. It is anticipated that full-time students will complete the program in 24 months in accordance with Table 2 Master of Public Health Recommended Course Sequence for Full-Time Students in the Nutrition and Dietetics Specialization.
Graduate students of the Division of Community Health and Humanities may be required to participate in education experiences which occur outside of the St. John's metropolitan area. Students may be responsible for their own associated transportation and accommodation.

The General Regulations of the School of Graduate Studies and the Degree Regulations outlined below will apply.

### 26.1 Qualifications for Admission

Admission to the Master of Public Health is limited and competitive. The regulations and procedures for admission are as given under the General Regulations of the School of Graduate Studies governing Master's degrees. In addition, to be considered for admission to the Nutrition and Dietetics specialization applicants must have successfully completed an undergraduate dietetics program accredited by Dietitians of Canada as indicated at www.dietitians.ca.

### 26.2 Program of Study

### 26.2.1 Population and Public Health

1. Minimum requirements for the M.P.H. degree in Population and Public Health will include the successful completion of 42 credit hours as follows:
a. Eight core courses: Biostatistics I (MED 6200), Epidemiology I (MED 6270), Policy and Decision Making (MED 6288), Disease and Injury Prevention (MED 6721), Environmental Health (MED 6722), Health Promotion (MED 6723), Public Health Leadership and Management (MED 6725), and MED 6726 Program Development In Public Health.
b. Six additional credit hours in elective courses chosen from the Courses listing below, or other courses as approved by the M.P.H. program coordinator.
c. The Public Health Seminar Series courses (MED 6700-6701).
d. Either, the Public Health Practicum (MED 6710) or the Public Health Capstone Research Project (MED 6711) as determined by the Graduate Program Committee depending on the professional background and experience of the student.
The Public Health Practicum is a full-time practice experience conducted in a work setting and following the guidelines set forth by the Public Health Agency of Canada (PHAC) at www.phac-aspc.gc.ca/index-eng.php.
All course work must be completed prior to the initiation of either the Public Health Practicum or the Public Health Capstone Research Project.

Table 1 Master of Public Health Recommended Course Sequence for Full-Time Students in the Population and Public Health

| Semester | Courses |
| :--- | :--- |
| Fall | MED 6270 Epidemiology I <br> MED 6288 Policy and Decision Making <br> MED 6700 Public Health Seminar Series I <br> MED 6725 Public Health Leadership and Management <br> MED 6726 Program Development In Public Health. <br> MED Elective Course |
| Winter | MED 6200 Biostatistics I <br> MED 6701 Public Health Seminar Series II <br> MED 6721 Disease and Injury Prevention <br> MED 6722 Environmental Health |
| MED 6723 Health Promotion |  |
| Spring | MED Elective Course |

### 26.2.2 Nutrition and Dietetics

1. Minimum requirements for the M.P.H. degree in Nutrition and Dietetics will include the successful completion of the following:
a. Six core courses: Policy and Decision Making (MED 6288), Epidemiology I (MED 6270), Community Health Research Methods (MED 6280), Biostatistics I (MED 6200), Community Nutrition (MED 6731), Professional Practice (MED 6730)
b. The Public Health Seminar Series courses (MED 6700, 6701)
c. The Dietetics Research Project (MED 671A/B)
d. The Dietetics Internship (MED 6733-6736). The Dietetics Internship is a practice experience conducted in a work setting and following the guidelines set forth by the Dietitians of Canada.
Dietetics Internship I \& II (MED 6733 and 6734) are non-credit, mandatory, part-time internship components completed during the first and second academic semesters of the program in accordance with Table 2 Master of Public Health Recommended Course Sequence for Full-Time Students in the Nutrition and Dietetics Specialization. A grade of NC (No credit) will be awarded for these two internship components.
Building on the components of Dietetics Internship I \& II, Dietetics Internship III \& IV (MED 6735 \& 6736) are full-time internship blocks each of which will normally extend beyond the regular semester timeframe. Evaluation of the internship blocks will be on a PASS/FAIL basis.
All core courses and seminars must be completed prior to the initiation of the Dietetics Internship III (MED 6735) and/or the Dietetics Research Project (MED 671A/B).

Table 2 Master of Public Health Recommended Course Sequence for Full-Time Students in the Nutrition and Dietetics Specialization

| Semester | Courses |
| :--- | :--- |
| Fall | 6270 Epidemiology I |
|  | 6280 Community Health Research Methods |
|  | 6288 Policy and Decision Making |
|  | 6700 Public Health Seminar Series I |
|  | 6733 Dietetics Internship I |
| Winter | 6200 Biostatistics I |
|  | 6731 Community Nutrition |
|  | 6730 Professional Practice |
|  | 6701 Public Health Seminar Series II |
|  | 6734 Dietetics Internship II |
| Spring | 671 A Dietetics Research Project |
| Fall | 671 B Dietetics Research Project |
| Winter | 6735 Dietetics Internship III |
| Spring | 6736 Dietetics Internship IV |

### 26.3 Courses

A selection of the following graduate courses shall be offered to meet the requirements of students, as far as the resources of the Faculty allow.
6102 Critical Theory in Health and Society
6200 Biostatistics I
6220 Introduction to Community Health
6247 Chronic Disease Epidemiology
6250 Basic Clinical Epidemiology
6270 Epidemiology I
6275 Epidemiology II
6280 Community Health Research Methods
6282 Canadian Health Care System
6288 Policy and Decision Making
6290 Determinants of Health: Healthy Public Policy
6293 Knowledge Transfer and Research Uptake
6294 Advanced Qualitative Methods
6390 Human Population Genetics
6700 Public Health Seminar Series I (1 credit hour)
6701 Public Health Seminar Series II (1 credit hour)
671A/B Dietetics Research Project ( 6 credit hours)
6710 Public Health Practicum (10 credit hours)
6711 Public Health Capstone Project (10 credit hours)
6720 Public Health Surveillance
6721 Disease and Injury Prevention
6722 Environmental Health
6723 Health Promotion
6724 Communicable Disease Prevention and Control
6725 Public Health Leadership and Management
6726 Program Development in Public Health
6730 Professional Practice
6731 Community Nutrition
6733 Dietetics Internship I (non-credit component)
6734 Dietetics Internship II (non-credit component)
6735 Dietetics Internship III (17 week Internship block - 10 credit hours)
6736 Dietetics Internship IV (16 week Internship block - 10 credit hours)

## 27 Regulations Governing the Degree of Master of Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
The degree of Master of Science (M.Sc.) is offered at present in Aquaculture, Biochemistry, Biology, Boreal Ecosystems and Agricultural Sciences, Chemistry, Cognitive and Behavioural Ecology, Computer Science, Earth Sciences (Geology), Earth Sciences (Geophysics), Environmental Science, Experimental Psychology, Fisheries Science, Food Science, Geography, Marine Biology, Mathematics, Physical Oceanography, Physics, Scientific Computing, Scientific Computing (Co-operative), and Statistics. Interdisciplinary studies are encouraged; applicants should consult the academic unit concerned.

### 27.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission an applicant will normally hold at least a high second class Honours Degree, or an M.D. Degree, or the equivalent of either, both in achievement and depth of study, from an institution recognized by the Senate, and shall have knowledge of the proposed field of specialization satisfactory to the Dean.
2. Any other applicant may be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least Grade B in courses in the proposed field of specialization.
b. the applicant's overall undergraduate record after the first year shows an average of at least Grade B in all courses taken.

In addition, an applicant may be required to demonstrate a satisfactory knowledge of the proposed field of study in an examination administered by the academic unit concerned.
3. Only in exceptional circumstances, and only on the recommendation of the academic unit concerned, will the Dean consider applicants who do not meet these requirements of Clause 2.
4. Applicants who do not possess the prerequisite academic qualifications should consult the appropriate academic unit about a program of further undergraduate courses. Such a program will be intended to raise their qualifications to a level considered academically equivalent to Honours. Such courses may not be used to fulfill the regulation course requirements of the M.Sc. Degree.
5. A high degree of literacy in English is required of all graduate students in the University.

Note: Some Departments have specific regulations in addition to those outlined above, and prospective applicants are advised to turn to the relevant part of this Calendar and acquaint themselves with the regulations of the Department or appropriate academic unit in which they are interested.

### 27.2 Program of Study and Research

1. The program of study for the Master of Science Degree shall consist of the successful completion of a program of courses and, in accordance with the specific program regulations, either of a thesis embodying original research or of a project and report.
2. Every student shall read at least 6 credit hours in graduate program courses in one subject or in closely related subjects, and such other courses as may be required in an individual program. Undergraduate courses may, if necessary, be included as additional courses.
3. Where Departmental regulations require more than the minimum number of credit hours, the Dean, on the recommendation of the appropriate academic unit, may waive in part the credit hour requirements for a Master's Degree, provided that no student may take less than the 6 required credit hours in graduate program courses.
4. Students may, with the approval of the Dean, augment their studies with 6 credit hours in other courses of their choice. The grading system in non-program courses shall be that appropriate to the particular course, and the final grades in these courses will be recorded on the student's transcripts. However, passing grades are not required in these non-program courses in order to continue in graduate studies or obtain a Master's Degree. (See General Regulation Evaluation, Evaluation of Graduate Students).
5. Every student shall submit a thesis or report on an approved subject in which systematic research has been conducted under the direction of a Supervisor recommended by the academic unit concerned and approved by the Dean. The student may be required to take an oral examination.
6. The program of courses, the thesis or report topic and the Supervisor, and all changes in these, must be approved by the Dean.

### 27.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree, a student shall obtain an A or B grade in each program course. (See General Regulation Evaluation, Evaluation of Graduate Students).
2. When it has been determined, on the basis of consultation with the student, the instructors in graduate courses, and the thesis or report Supervisor, that a student's work has fallen below a satisfactory level, the Supervisor or the Head of the appropriate academic unit may recommend to the Dean that such a student be required to withdraw from the program.

### 27.4 Thesis

See General Regulation Theses and Reports.
Note: Every student in graduate studies shall comply with the General Regulations, the Degree Regulations, and any additional requirements of the appropriate academic unit.

### 27.5 Sustainable Aquaculture

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science
The program of study leading to the Master of Science in Sustainable Aquaculture is designed to instruct students in research using scientific principles derived from a wide range of disciplines including Behaviour, Biochemistry, Biology, Ecology, Food Science, Genomics, Nutrition, and Physiology. It is an interdisciplinary program and often involves several fields of study. Research projects may include field and/or laboratory studies of one or more species of marine or freshwater flora and/or fauna. The Aquaculture group consists of faculty members from the Fisheries and Marine Institute of Memorial University of Newfoundland and the Departments of Biology, Biochemistry, and Ocean Sciences of Memorial University of Newfoundland. Research scientists at other institutions, e.g., Fisheries and Oceans Canada, complement the group in offering advice, facilities, and expertise to students in the program.
The Sustainable Aquaculture Administrative Committee is responsible for the program. This Committee is composed of seven members appointed by the Dean of Science including two to three members from the Department of Ocean Sciences, two to three members from
the Fisheries and Marine Institute of Memorial University of Newfoundland, and two members from appropriate academic units at Memorial University of Newfoundland. In addition, the Heads of the Departments of Biochemistry, Biology, and Ocean Sciences, and the Head of the School of Fisheries of the Fisheries and Marine Institute of Memorial University of Newfoundland are ex-officio members. The Committee makes recommendations to the Dean of the School of Graduate Studies concerning the academic requirements of the program: admission, course programs of individual students, financial support, composition of supervisory committees, and theses examiners. The Chair of the Committee will also ensure that a supervisory report form for each student in the program is submitted annually to the Dean.

### 27.5.1 Qualifications for Admission

To be considered for admission to the Master of Science in Sustainable Aquaculture, an applicant shall normally hold one of the following: at least a second class Honours degree, or an equivalent both in achievement and depth of study, from an institution recognized by the Senate, or successful completion of the Advanced Diploma in Sustainable Aquaculture offered by the Fisheries and Marine Institute of Memorial University of Newfoundland, with academic standing deemed appropriate by the Committee.

### 27.5.2 Program of Study

1. The Master of Science Degree requires the successful completion of a program of courses and of a thesis embodying original research.
2. All students will be required to complete 6 credit hours in graduate courses which will normally include at least one of the following: AQUA 6000 - Shellfish Culture and Enhancement, AQUA 6100 - Finfish Aquaculture, or AQUA 6200 - Aquaculture and the Environment.
3. Students who do not hold the Advanced Diploma in Sustainable Aquaculture may be required to successfully complete a selection of its component courses.
4. Further courses may be required depending on the background of the individual studen
5. Before the thesis is submitted, the student shall present an open seminar on the topic of investigation to the appropriate academic units, as recommended by the Administrative Committee. Any serious deficiencies in the thesis noticed at this stage should be carefully considered, in consultation with the Supervisor, for rectification.
6. The student will be required to comply with all other regulations governing the graduate Degree of Master of Science.

### 27.5.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.

## Aquaculture

6000 Shellfish Culture and Enhancement
6100 Finfish Aquaculture
6200 Aquaculture and the Environment
6201-6209 Special Topics in Aquaculture (prerequisite: Permission of Chair of Program)

## Biochemistry

6630 Marine Biochemistry

## Biology

6000 Research Topics in Microbiology
6710 Marine Benthic Biology
7101 Topics in Marine Biology
7220 Quantitative Methods in Biology
7551 Fisheries Resource Management


Cognitive and Behavioural Ecology
6351 Behavioural Ecology and Sociobiology

## Engineering

9603 Environmental Sampling and Pollutant Analysis (cross-listed as Environmental Science 6005)
9605 Advanced Waste Water Treatment
9622 Environmental Statistics

## Environmental Science

6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology
6007 Environmental Risk Assessment (same as Engineering 9609)

## Geography

6250 Conservation of Naturral Resources
6410 Climatology

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Marine Studies (Fisheries Resource Management) Program Courses
6001 Fisheries Ecology
6005 Overview of World Fisheries
6009 Current Issues for Sustainable Fisheries
Ocean Sciences
7100 Biological Oceanography
7200 Adaptations to the Marine Environment
7300 Plankton Dynamics
7400 Fisheries Resource Management
7500 Immunology and Diseases of Aquatic Organisms
Physics
6316 Ocean Data Analysis
6320 Ocean Turbulence and Mixing
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Technology Management (Aquaculture Technology Option) Program Courses
6056 Management of International Development
6071 Management of Aquaculture Technology
6072 Animal Husbandry Management
6073 Aquaculture Environmental Management
6074 Aquaculture Site and Operational Assessment
6075 Aquaculture Engineering Technology Management
Note: Consult the Program for a list of titles and information regarding availability.

### 27.6 Biochemistry

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/biochem
The Degree of Master of Science is offered in Biochemistry or Food Science to full-time and part-time students.

### 27.6.1 Admission

The admission requirements for the graduate programs in Biochemistry and Food Science are as given under Regulations Governing Master of Science Degrees.

### 27.6.2 Program of Study

1. The program of a student for the M.Sc. Degree shall be the responsibility of the supervisory committee, composed of the Supervisor and at least two other faculty members recommended with the concurrence of the Supervisor by the Head of the Department or delegate.
2. All students must enrol in Biochemistry 6999 (Seminars in Biochemistry and Food Science), and must complete Biochemistry 7000 (Graduate Skills) plus a minimum of 6 credit hours of graduate courses with a minimum B grade. Depending on the background and/ or area of specialization, a student's program may include additional courses taken for credit in Biochemistry, Food Science, or related subjects.
3. It is the responsibility of the student to arrange regular meetings with the student's supervisory committee. A semi-annual report, prepared by the Supervisor and signed by all members of the supervisory committee, is required to be given to the Head of the Department or delegate.

### 27.6.3 Courses

A series of advanced courses in the areas outlined below will be offered. Other than Biochemistry 6999 and Biochemistry 7000, normally only one course will be offered per semester.
6000 Advanced Topics in Lipid and Lipoprotein Metabolism
6001-6009 Special Topics in Biochemistry
6010-6019 Special Topics in Nutrition and Metabolism
6020-6029 Special Topics in Food Science
6400 Control of Intermediary Metabolism
6460 Structural Biochemistry
6520 Nutritional Biochemistry
6530 Food Biochemistry
6590 Cellular, Molecular and Developmental Biology (credit restricted with Biology 6590 and Medicine 6590)
6630 Marine Biochemistry
6680 Processing and Quality of Foods
6999 Seminars in Biochemistry and Food Science
7000 Graduate Skills

### 27.7 Biology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/biology
The Degree of Master of Science is offered in Biology to full-time and part-time students. Students interested in animal behaviour should also consult the section in the Calendar describing the Master of Science in Cognitive and Behavioural Ecology program. In addition, a Master of Science Degree is offered in Aquaculture and in Marine Biology. See appropriate sections of this Calendar.

### 27.7.1 Program of Study

1. The program of a student shall be the responsibility of a Supervisory Committee composed of the Supervisor and at least two other appropriate members recommended to the Dean by the Head (or delegate) of the Department with the concurrence of the Supervisor.
2. The Supervisory Committee shall interview the student normally within a month of first registration, to discuss the student's program and to explore any areas of weakness in the student's biological knowledge, especially where these relate to the intended areas of research.
3. A student will be required to take a minimum of 6 credit hours and Biology 7000 (Graduate Core Seminar).
4. It is the function of a Supervisory Committee to have regular meetings, at least annually, with its graduate student. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Department. A copy will be sent to the graduate student and to the Dean of Graduate Studies.
5. The student will present a tentative outline of the proposed research to the Supervisory Committee, with a copy to the Department by the end of the second semester, and preferably prior to commencement of the research.
6. The student will present a research seminar to the Department, normally by the end of the second semester following admission, to describe the research topic being investigated and the methodologies to be employed. This seminar provides an opportunity for the student to receive constructive input from the broad biological community.
7. The student must present a thesis seminar of $30-40$ minutes duration to the Department prior to submission of the thesis to the

School of Graduate Studies. The student will be questioned by a panel approved by the Departmental Graduate Studies Committee, in consultation with the student's Supervisory Committee. All others in attendance will be invited to question the student before adjournment. Deficiencies noted at this stage should be carefully considered by the student and the Supervisory Committee prior to submission of the thesis for final examination.
Under exceptional circumstances, this requirement may be waived by the Head of the Department (or delegate).
8. Each Master's student shall spend at least one semester in residence as a full-time student within the Department during the program. It is recommended that this semester be at the beginning of the program.
Under exceptional circumstances, this requirement may be waived by the Head of the Department (or delegate)
9. If students, in the opinion of the Supervisor, Committee and Department, are not making satisfactory progress, they will be required to withdraw from the program.
10. Theses shall conform to Theses and Reports of the General Regulations of the School of Graduate Studies and to the regulations in the Departmental Guidelines.

### 27.7.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Research Topics in Microbiology
6131 Models in Biology (credit cannot be obtained if already received for Biology 4607)
6351 Behavioural Ecology and Sociobiology (cross-listed as Psychology 6351) credit cannot be obtained if already received for Biology 4701
6590 Molecular Biology I (cross-listed as Medicine 6590 and credit-restricted with Biochemistry 6590) prerequisites. Biology 4241 (or equivalent)
6591 Molecular Biology II (cross-listed as Medicine 6591 and credit-restricted with the former Biochemistry 6591) prerequisites: Biology 4241 (or equivalent)
6592 Bacterial Genetics (credit-restricted with the former Biochemistry 6592) prerequisite: Biology 4241 (or equivalent)
6593 Selected Readings in Molecular Biology (credit-restricted with the former Biochemistry 6593) prerequisites or Co-requisites: one of Biology, Biochemistry or Medicine 6590, and one of Biology 6591, Medicine 6591, or the former Biochemistry 6591 (or equivalent)
6710 Marine Benthic Biology
7000 Graduate Core Seminar (cross-listed as Ocean Science 7000)
7101 Topics in Marine Biology
7201 Topics in Cellular and Molecular Biology and Physiology
7220 Quantitative Methods in Biology (credit cannot be obtained if already received for Biology 4605)
7300 Ornithology (credit cannot be obtained if already received for Biology 4620)
7301 Topics in Ecology and Conservation Biology
7530 The Molecular Biology of Development
7535 Research Methods in Marine Science
7920-7960 Special Topics in Biology (CMSC Biology 7931)
7931 Research Methods in Genetic Biotechnology (Biology 7931 may be delivered in an accelerated format outside of the regular semester timeframe)

### 27.8 Chemistry

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science
www.mun.ca/chem

### 27.8.1 Program of Study

1. The Degree of Master of Science in Chemistry is offered as full-time or part-time study.
a. Preference for admission will be given to students with a B.Sc. (Honours) Degree in Chemistry from a recognized university.
b. Students holding a B.Sc. Degree in Chemistry from a university of recognized standing with a minimum overall average of $65 \%$ and minimum average of $65 \%$ in all Chemistry courses taken after the first year will be considered for admission to the Chemistry M.Sc. program. Students not admissible under 1.a. may, on the advice of the Supervisory Committee, be required to pass qualifying exams and/or supplementary undergraduate courses with a minimum $B$ grade.
c. Students with a first class B.Sc. in an area other than Chemistry will also be considered for admission. Students not acceptable under 1.a. or 1.b. who have a strong background in an appropriate area of specialization may, on the advice of the Supervisory Committee, be required to pass qualifying exams and/or supplementary undergraduate courses with a minimum $B$ grade.
d. Upon recommendation of their supervisor, students will write American Chemical Society (ACS) placement test(s) in the first two weeks of their initial semester of registration in order to determine an appropriate course program.
2. Students will be assigned a Supervisory Committee consisting of the Supervisor and at least two other appropriate faculty members appointed by the Dean on the recommendation of the Chemistry Deputy Head (Graduate Studies).
3. The program of a student must be arranged by the Supervisor before the second semester of registration in consultation with the Supervisory Committee and the student. It is the responsibility of the Supervisory Committee to meet at least annually with the student, to provide guidance at all stages of the student's program, and, in consultation with the student, to prepare written annual progress reports for submission to the Dean of Graduate Studies.
4. Students are normally required to successfully complete Chemistry 6001 (Master's Seminar) and a minimum of 6 credit hours of graduate Chemistry courses with a minimum B grade. Additional program courses may be assigned by the Supervisory Committee.
5. Students are required to attend Departmental seminars.
6. Students must submit a thesis deemed acceptable to two examiners as described under Regulations Governing Master of Science Degrees. An oral defence is not required.

### 27.8.2 Courses

6001 Master's Seminar
6004 Project Seminar
6110 Analytical Chemistry II

6150 Advanced Spectroscopic Techniques
6151 Analytical Separations and Organic Mass Spectrometry
6152 Electroanalytical Techniques
6153 Techniques in Sampling, Trace Analysis and Chemometrics
6154 Business Management and Good Laboratory Practice
6155 Computers in Instrumental Analysis and Basic Electronics (same as Med 6070)
6156 Analytical Method Development and Sampling
6160 Laboratory Projects in Sampling, Electroanalysis and Trace Analysis
6161 Laboratory Projects in Analytical Separations and Spectroscopic Techniques
6190-9 Selected Topics in Analytical Chemistry
6201 Bioinorganic Chemistry
6202 Main Group Chemistry
6204 Mechanisms in Catalysis
6205 Photochemistry of Transition Metal Complexes
6206 Green Chemistry
6210 Organometallic Chemistry
6290-9 Selected Topics in Inorganic Chemistry
6300 Quantum Chemistry I
6301 Quantum Chemistry II
6302 Molecular Spectroscopy
6304 Computational Chemistry I
6310 Electronic Structure Theory
6323 Chemical Thermodynamics I
6324 Chemical Thermodynamics II
6340 Biophysical Chemistry
6350 Electrochemical Kinetics
6360 Solid State Chemistry
6370 Nanoscale Phenomena
6380 Adsorption on Surfaces
6381 Surface and Interface Science
6382-9 Selected Topics in Physical Chemistry
6390-8 Selected Topics in Physical Chemistry
6399 Chemical Kinetics and Dynamics
6401 Organic Spectroscopic Analysis I
6402 Organic Spectroscopic Analysis II
6421 Natural Products Chemistry
6460 Organic Synthesis
6470 Physical Organic Chemistry
6490-9 Selected Topics in Organic Chemistry
6590-9 Selected Topics in Theoretical and Compútational Chemistry
6600 Applications of Inorganic and Organometallic Chemistry to Toxicology
6620 Environmental Chemistry

### 27.9 Cognitive and Behavioural Ecology

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science

### 27.9.1 General Information



1. The Cognitive and Behayioural Ecology Program is interdisciplinary and designed to train students in research that integrates cognitive and behavioural studies at the ecological level. Molecular, developmental, and evolutionary aspects of cognition and behaviour are also studied. Súpervisors include faculty from the Departments of Biology, Ocean Sciences, Psychology, the Faculty of Medicine and the Environmental Science Program at Grenfell Campus, as well as adjunct faculty from the Canadian Wildlife Service, Department of Fisheries and Oceans, the Newfoundland and Labrador Forestry and Wildlife Divisions and Parks Canada. The Departments of Biology and Psychology jointly offer the Master of Science and the Doctor of Philosophy degrees in Cognitive and Behavioural Ecology.
2. The Administrative Committee is responsible for the Program. Committee members are appointed by the Dean of Science, on the recommendation of the Chair of the Committee and of the Heads of Biology and Psychology. The Committee Chair is elected by the committee members and appointed by the Dean of Science. The Committee makes recommendations to the Dean of Graduate Studies concerning admissions and academic requirements. In consultation with supervisors, recommendations are made concerning course programs, financial support, thesis committees, comprehensive and thesis topics, examiners and students' annual progress. Upon program completion, the Committee certifies that all requirements for the appropriate degree have been met. The Department of the Supervisor ensures that adequate facilities are provided for each student. Students in the Cognitive and Behavioural Ecology Program are considered for teaching assistantships in the Psychology or Biology Departments.


### 27.9.2 Program of Study

1. Students normally take three courses (9 credit hours) in the first year. Students will be required to take Behavioural Ecology and Sociobiology (CABE 6351), Field and Lab Methods in Animal Behaviour and Behavioural Ecology (CABE 7000) and one elective, normally Quantitative Methods in Biology (BIOL 7220) or Advanced Statistics in Psychology (6000), in consultation with the Supervisor.
2. Upon completion but before submission of the thesis, the student is required to give a formal thesis presentation.
3. The student will be required to comply with all other regulations governing the graduate Degree of Master of Science.

Table of Credit Restrictions - Master of Science in Cognitive and Behavioural Ecology
(Credit may be obtained for only one course from each of the pairs of courses listed in this table.)

| Present Course | Former Course |
| :--- | :--- |
| CABE 6240 | Biopsychology 6240 |
| CABE 6350 | Biopsychology 6350 |
| CABE 6351 | Biopsychology 6351 |
| CABE 7000 | Biopsychology 7000 |
| $\mathbf{2 7 . 9 . 3}$ Courses |  |

### 27.9.3 Courses

Biology 7220 Quantitative Methods in Biology
Cognitive and Behavioural Ecology 6240 Special Topics
Cognitive and Behavioural Ecology 6350 Behavioural Ontogeny
Cognitive and Behavioural Ecology 6351 Behavioural Ecology and Sociobiology
Cognitive and Behavioural Ecology 7000 Field and Lab Methods in Animal Behaviour and Behavioural Ecology
Psychology 6000 Advanced Statistics in Psychology

### 27.10 Computer Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/computerscience
The degrees of Master of Science and Doctor of Philosophy are offered in Computer Science.

### 27.10.1 Admission Requirements

Admission into a Master's program in Computer Science is restricted to students holding at least a Bachelor degree (major in Computer Science or Computer Engineering) with a minimum average of $75 \%$ overall. When circumstances warrant, this requirement may be waived on the recommendation of the Head of the Department. Applicants should also refer to the Qualifications for Admission given under the Regulations Governing the Degree of Master of Science within the School of Graduate Studies section of the current Calendar. International applicants are strongly encouraged to submit results of the (general) Graduate Record Examination (GRE) test.

### 27.10.2 Programs

### 27.10.2.1 Option 1 - Thesis Route

$\bullet$

1. Students are required to complete a minimum of 15 credit hours in graduate program courses, 9 of which must be in Computer Science (excluding COMP 601W and COMP 6999).
2. Full-time students are expected to complete their course work within their first year of studies. Part-time students are expected to complete their course work by the end of the seventh semester in their program.
3. Students must participate in the Research Forum at least once during their program. The Student Research Forum is organized by the Department of Computer Science and takes place in the Winter term of each academic year.
4. Each student is required to submit an acceptable thesis. The thesis project may involve a theoretical investigation and/or the development of an original, practical system. Each student is required to present a tentative outline of the student's proposed research to the Supervisor, with a copy to the Department Committee on Graduate Studies, by the end of the student's third semester in the program (sixth semester for part-time students). A fifteen minute oral presentation of the proposal is to be scheduled and given within four weeks of the submission date.
5. Prior to submission of a thesis, normally in the last semester of the program, students are required to present a seminar on the thesis topic, methods employed, and research results.

### 27.10.2. Option 2 Course/Project Route with Work Term

1. Students are required to complete a minimum of 24 credit hours in graduate program courses, of which at least 18 credit hours must be in Computer Science.
2. Within this credit requirement, a student must take the following courses: COMP 6999 (Master's Project)
One course in Software Engineering (COMP 6905)
One course in Algorithms (COMP 6901 or COMP 6902)
3. Additionally students are required to complete one co-operative education work term (COMP 601W). The work term is a full-time, paid work experience with one employer and either a four or eight months in duration. The work term should start in the third semester of the program. The work term can be deferred to the fourth semester, but normally only in the event of an unsuccessful job search for the third semester.
4. The dates for starting and finishing each work term are shown in the University Diary.
5. Students must successfully complete at least 12 credit hours (four courses) prior to beginning their work term. Students must have at least one required course remaining after their work term.
6. Students will conduct job searches with an Academic Staff Member in Co-operative Education in cooperation with the Department of Computer Science. It is the student's responsibility to seek and obtain a work term placement and to communicate with all parties both within the University and beyond in a professional manner. Work term placements cannot be guaranteed by the Department of Computer Science or an Academic Staff Member in Co-operative Education, although every effort will be made to assist students in their job search. Work term placements obtained outside the job competition must be confirmed by letter from the employer and approved by the Head of Computer Science and by an Academic Staff Member in Co-operative Education on or before the first day of the work term. Work term placements may be outside Newfoundland and Labrador.
7. Each work term placement will be supervised by the student's program Supervisor, the on-site Supervisor assigned by the employer and the Academic Staff Member in Co-operative Education. The overall evaluation of the work term is the responsibility of the program Supervisor, on-site Supervisor and the Academic Staff Member in Co-operative Education. The work term shall consist of two components:
a. On-the-job Student Performance as evaluated by the on-site Supervisor and the Academic Staff Member in Co-operative Education, in consultation with the program Supervisor.
b. A Work Report graded by the program Supervisor in consultation with the on-site Supervisor.
8. Evaluation of the work term will result in the assignment of one of the following final grades:
a. Pass with Distinction: indicates outstanding performance in both the work report and work performance.
b. Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and work performance.
c. Fail: Indicates FAILING PERFORMANCE in the work report and/or the work performance. If a failing grade is assigned, the student's Masters program will be terminated.
9. Prior to graduation and after successfully completing COMP 6999 (Master's Project), students are required to present a seminar on their projects.

### 27.10.3 Other Regulations

1. Students from either Option 1-Thesis Route or Option 2-Course/Project Route with Work Term may request to transfer between both options once during their studies, after at least two semesters in the program.
2. All students are expected to take an active part in seminars and other aspects of the academic life of the Department of Computer Science.
3. Full-time students are expected to complete all program requirements in two years. Part-time students are expected to complete all program requirements in four years.

### 27.10.4 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow. Normally, students will be expected to complete their course work during the fall and winter semesters. Courses might not be offered in the spring semester.

## 601W Work Term

6758-6769 Special Topics in Computer Applications
6770-6790 Special Topics in Computer Science
690A/B Research Methods in Computer Science
6901 Applied Algorithms (credit may be obtained for only one of 6901 and 6783)
6902 Computational Complexity (credit may be obtained for only one of 6902 and 6743)
6903 Concurrent Computing
6904 Advanced Computer Architecture (credit may be obtained for only one of 6904 and 6722)
6905 Software Engineering (credit may only be obtained for one of 6905 or 6713)
6906 Numerical Methods (credit may only be obtained for one of 6906 or 6731)
6907 Data Mining Techniques and Methodologies (credit may be obtained for only one of 6907 and 6762)
6908 Database Technology and Applications (credit may be obtained for only one of 6908 and 6751)
6909 Fundamentals of Computer Graphics (credit may be obtained for only one of 6909 or 6752)
6910 Services Computing, Semantic Web and Cloud Computing
6911 Bio-inspired Computing
6912 Autonomous Robotics (credit may be obtained for only one of 6912 and 6778)
6913 Bioinformatics
6914 3D Modelling and Rendering
6915 Machine Learning
6916 Security and Privacy
6918 Digital Image Processing (credit may be obtained for only one of 6918 or 6756)
6921 Syntax and Semantics of Programming Languages (credit may be obtained for only one of 6921 or 6711)
6922 Compiling Methods (credit may be obtained for only one of 6922 and 6712)
6924 Formal Grammars, Automata and Languages
6925 Advanced Operating Systems
6926 Performance Evaluation of Computer Systems (credit may be obtained for only one of 6726 and 6926)
6928 Knowledge-Based Systems (credit may be obtained for only one of 6928 or 6755)
6929 Advanced Computational Geometry (credit may be obtained for only one of 6929 or 6745)
6930 Theory of Databases (credit may be obtained for only one of 6930 or 6742)
6931 Matrix Computations and Applications (credit may only be obtained for one of 6931, 6732, and CMSC 6910) (cross-listed with CMSC 6910)
6933 Nonlinear and Linear Optimization (cross-listed with Mathematics 6202)
6932 Matrix Computations in Control (credit may only be obtained for one of 6932 or 6738)
6999 Master's Project

### 27.11 Earth Sciences

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/earthsciences
The degrees of Master of Science and Doctor of Philosophy are offered in Earth Sciences (Geology) and Earth Sciences (Geophysics) by full-time and part-time study.

### 27.11.1 Program of Study

1. Admission into a Master's Degree program in Earth Sciences (Geology) and Earth Sciences (Geophysics) is restricted to students holding at least a B.Sc. Degree with second class Honours. When circumstances warrant, this requirement may be waived by the School of Graduate Studies on the recommendation of the Head of the Department.
2. Each student will be assigned a multi-member supervisory committee. This committee shall consist of the Supervisor and at least one other member. Within two weeks of the first registration in the M.Sc. Degree program, a student will meet with the student's supervisory committee. Within six months, the student and the supervisory committee will agree on a written thesis proposal outlining the objectives, methods, timetable and funding for the project, and provide the proposal (signed by the student and supervisory committee) to the Head for inclusion in the student's file.
3. A student for the M.Sc. Degree must complete a minimum of 6 credit hours in program courses. The courses must be selected from the overview and general courses below or with the approval of the supervisory committee and Head of the Department, other graduate level courses including those offered by other departments. Depending on background and/or area of specialization, a student also may be required to complete additional courses in Earth Sciences or related subjects.
4. All course requirements should be completed within one year from the date of first registration in the M.Sc. Degree program
5. A student is required to give an oral presentation to the Department on the results of their research. This presentation is normally given during the second year of the program and must take place within the Graduate Student Seminar Series.
6. A student is required to give an oral defence of their thesis research. The defence will consist of three voting members and will be comprised of the supervisory committee, a third supervisory committee member (if one exists), or one other regular faculty member (who may also be suggested to examine the thesis), and the chair or delegate (non-voting). The defence presentation will be open to the public, but examiner questions will be held in camera. Possible outcomes of the defence are the same as for the Ph.D. as outlined under Evaluation of Ph.D. and Psy.D. Theses, The Examination Process. Students who earn a "Pass" or "Pass with Distinction" can proceed to the thesis examination following the procedures of the School of Graduate Studies (SGS). Students who earn a "Pass Subject to Conditions" must satisfy those conditions before submitting their thesis for examination. Students who earn a "Re-Examination Required" have six months to complete that re-examination or their program will be terminated. Students who earn a "Fail" will have their program terminated. Once the defence and any necessary revisions are completed, the supervisory committee will complete the Supervisory Approval Form and the thesis may then proceed to examination following the SGS procedures.
7. The M.Sc. Degree program will conclude with a thesis examination as prescribed in the Regulations Governing the Degree of Master of Science.
8. The Supervisor and the Head of the Department may recommend to the Dean of Graduate Studies that a student who is not making satisfactory progress be required to withdraw from the program.

### 27.11.2 Courses

A selection of courses will be offered to meet the requirements of students as far as the resources of the Department will allow.

### 27.11.2.1 Overview Courses

7110 Physics of the Solid Earth
7120 Crustal Geophysics
7300 Changes in Global Paleoenvironment
7400 Tectonic Regimes
7410 Engineering and Environmental Geology
7500 Chemical Fluxes in the Earth
7810 Paleoecology (same as the former 6810. credit may be obtained for only one of 7810 or 6810)

### 27.11.2.2 General Courses

6070 Quantitative Techniques in Mineralogy and Metamorphic Petrology
6105 Advanced Field Course in Applied Geophysics (may be offered in accelerated format)
6141 Rotation of the Earth
6142 Theory of Global Geodynamics
6152 Paleomagnetism
6171 Advanced Exploration Seismology
6172 Borehole Seismic
6175 Gravity and Magnetic Methods
6177 Mathematical Formulations of Seismic Wave Phenomena
6210 Genesis of Mineral Deposits
6320 Marine Geology
6400 Flow and Transport in Fractured Rock
6410 Advanced Engineering and Environmental Geology
6420 Deformation Mechanisms
6500 Stable Isotope Geochemistry
6510 Trace Element Geochemistry
6520 Methods in Advanced Research in Geochemistry
6540 Radiogenic Isotope Geochemistry
6550 Biogeochemistry
6600 Petroleum Geology
6740 Modern and Ancient Sedimentary Environments
6750 Sequence Strategraphy
6801 Palaeobiology of Early Animal Life
6820 Palynology and Paleobotany

### 27.12 Environmental Science

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science
(see also Master of Environmental Science)

### 27.12.1 Program of Study

1. The Environmental Science Program is an interdisciplinary graduate program involving the departments of the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Medicine, and the Faculty of Engineering and Applied Science. There are three Environmental Science Graduate Degree streams: the Master of Science (M.Sc., Environmental Science), Master of Environmental Science (M.Env.Sci.), and the Doctor of Philosophy (Ph.D., Environmental Science). The program is available on a full or part-time basis.
2. The program is administered by a Board of Studies appointed by the Dean of Science. Supervisors of graduate students in the program include faculty from the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Engineering and Applied Science, the Faculty of Medicine, and the Environmental Science Program at the Grenfell Campus, as well as adjunct appointees to the program (as a co-supervisor).

### 27.12.2 Qualifications for Admission

Admission is limited and competitive. To be considered for admission applicants shall normally hold a Bachelor's (Honours) degree in Science, Geography, or Environmental Science with at least second class standing, or equivalent, or a Bachelor's degree in Engineering from an institution recognized by the Senate or shall have qualifications and/or experience in environmental science acceptable to the Dean of Graduate Studies and the Board of Studies. The Board of Studies make recommendations on admission to the Dean of Graduate Studies.

### 27.12.3 Degree Requirements

1. To the extent that resources permit, individual programs will be developed to suit students' interests and needs. However all programs must be approved by the Board of Studies and by the Dean of Graduate Studies. All General Regulations of the School of Graduate Studies shall apply to these degrees.
2. The Master of Science (Environmental Science) is a research Degree which includes a thesis and course work. The thesis research will focus on environmental topics relevant to the student's background. The course component has two aims: to broaden the student's understanding of environmental issues; and to provide further training in areas of research specialization for the thesis.
3. Each student will have a Supervisory Committee normally consisting of a Supervisor and two others. The Supervisory Committee will be appointed by the Dean of Graduate Studies on the recommendation of the Board of Studies for Environmental Science.
4. The program of each student will consist of a minimum of 12 credit hours in program courses which will include Environmental Science 6000 and Environmental Science 6010. Of the 6 credit hours remaining in program courses, 3 credit hours will be from Environmental Science 6001, 6002, and 6003 and the other 3 credit hours will be related to the student's specialty and will normally be chosen from graduate courses offered by the Faculties of Science, Humanities and Social Sciences, Medicine, and Engineering and Applied Science.
5. All students will be required to submit a thesis embodying the results of systematic research on an approved topic. The thesis will be evaluated according to procedures outlined in General Regulations, Theses and Reports.

### 27.12.4 Courses

6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology
6004 Environmental Pollution and Mitigation (cross-listed as ENGI 9601)
6007 Environmental Risk Assessment (cross-listed as ENGI 9609)
6008 Air Pollution (same as ENGI 9624)
6009 Environmental Science Project
6010 Environmental Seminar
6201-6210 Special Topics in Environmental Science

### 27.13 Food Science

See Biochemistry.

### 27.14 Geography

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/science
www.mun.ca/geog

### 27.14.1 General Information

1. The degrees of Master of Arts and Master of Science are offered in Geography by full-time or part-time study.
2. Admission requirements are set forth in the General Regulations of the School of Graduate Studies and Degree Regulations for Master of Arts and Master of Science.
3. The deadline for submission of applications for admission is January 15. Students will normally commence their programs in the Fall semester.
4. An applicant will be admitted to a graduate program only if a faculty member agrees to act as Supervisor. A supervisory committee will be established after admission, normally consisting of the Supervisor and two other individuals, one of whom will normally be a member of the Department.
5. Major research areas for graduate study at the master's level are cultural, political, historical, economic, urban, resource management, community and regional development, geomorphology, Quaternary environments, climatology, and geographic information sciences.
6. Students will register for the M.A. program if their fields of interest lie in an area of Human Geography or for the M.Sc. if their fields of interest are in Physical Geography or Geographic Information Sciences.
7. It is expected that the program of study and research for the M.A. or M.Sc. will normally be completed in a maximum of two years of full-time work, or three years of part-time work.
8. Students must successfully complete a minimum of 12 credit hours of graduate program courses with a minimum grade of $B$ in each. Geography 6000 and 6001 will be required courses for all students who have not already completed equivalent courses at the Honours or post-graduate level.
9. Students whose undergraduate Degree is not in geography will normally be required to complete some additional undergraduate * program courses during their first year of study, in addition to the required graduate program courses. Normally four such undergraduate courses will be required, and a minimum grade of $70 \%$ must be obtained in each.
10. Each student will be required to present a seminar on their research to the Department.
11. Each student must submit a thesis based on their own original research. This thesis will be examined in accordance with the General Regulations of the School of Graduate Studies.

### 27.14.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.
6000 Development of Geographical Thought and Practice I
6001 Development of Geographical Thought and Practice II
6002 Directed Readings in Geography
6100 Research Techniques in A Selected Field of Geography I
6101 Research Techniques in A Selected Field of Geography II
6120 Geospatial Modelling and Analysis
6150 Environmental Remote Sensing and Image Analysis
6200 Economic Geography I
6201 Economic Geography II
6204 Sustainable Community and Regional Development
6250 Conservation and Sustainability of Natural Resources
6251 Survey Design, Questionnaire Development and Techniques of Data Collection
6300 Problems in Fisheries Geography
6400 Fluvial Geomorphology
6401 Glacial Geomorphology
6402 Coastal Geomorphology
6410 Climatology
6420 Quaternary Geography
6430 Biogeography
6500 Cultural Geography
6600 Historical Geography
6700 Political Geography
6800 Urban Geography
6821 Advanced Computer Mapping
6900 Graduate Seminar in Regional Geography 6990-95 Special Topics in Geography

### 27.15 Geology

See Earth Sciences.

### 27.16 Geophysics

See Earth Sciences.

### 27.17 Marine Biology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/osc
The degree of Master of Science (M.Sc.) is offered in Marine Biology by full-time and part-time study through the Department of Ocean Sciences. Areas of concentration include: Biological Oceanography, Marine Ecology and Evolution, Functional Biology of Marine Organisms, Fisheries and Aquaculture, and Marine Biogeochemistry.

### 27.17.1 Admission and Program of Study

1. Admission into the Master of Science degree program in Marine Biology is normally restricted to students holding at least a Bachelor of Science degree with second class Honours. When circumstances warrant, the requirement for a second class Honours may be waived by the School of Graduate Studies on the recommendation of the Head of the Department.
2. Each student will be assigned a Supervisory Committee consisting of the Supervisor and at least one other member. Within three months of the first registration in the M.Sc. degree program, the student will meet with the student's Supervisory Committee. Within six months, the student and the Supervisory Committee will agree on a written thesis proposal outlining the objectives, methods, timetable and funding for the project, and provide the proposal (signed by the student and the supervisory committee) to the Head for inclusion in the student's file.
3. A student is required to complete a minimum of 9 credit hours of graduate program courses as follows:

- Ocean Sciences 7000
- One of Ocean Sciences 7100 or 7200
- 3 additional credit hours selected from other Ocean Sciences graduate courses or relevant courses in other Departments as approved by the Supervisory Committee

4. All course requirements should be completed within four semesters from the date of first registration in the M.Sc. degree program.
5. A student is required to give an oral presentation to the Department on the results of the student's research. This presentation should be given after completion of a thesis draft.
6. The M.Sc. degree program will conclude with a thesis examination as prescribed in the School of Graduate Studies General Regulations, Theses and Reports.

### 27.17.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
OCSC 7000 Graduate Core Seminar (cross-listed as Biology 7000)
OCSC 7100 Biological Oceanography
OCSC 7200 Adaptations to the Marine Environment
OCSC 7300 Plankton Dynamics
OCSC 7400 Fisheries Resource Management
OCSC 7500-7515 Special Topics in Ocean Sciences

### 27.18 Mathematics and Statistics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/math
The degrees of Master of Applied Statistics (see appropriate calendar entry), Master of Science, and Doctor of Philosophy are offered in the Department of Mathematics and Statistics. The Masters' degrees are offered by full-time and part-time studies.

### 27.18.1 Specific Requirements for the M.Sc. in Mathematics

Every student for the M.Sc. in Mathematics is required to complete one of two options:

1. Option 1: MATH 696A/B, two courses from MATH 6160, 6310, 6332, 6351, and a minimum of 9 further credit hours in courses chosen from the departmental course offerings, excluding MATH 6299, and a thesis as per General Regulations, Theses and Reports.
2. Option 2: MATH 6299, 696A/B, three courses from MATH 6160, 6310, 6332, 6351, and a minimum of 9 further credit hours in courses chosen from the departmental course offering's.

### 27.18.2 Specific Requirements for the M.Sc. in Statistics

Every student for the M.Sc. in Statistics is required to complete a minimum of 18 credit hours in graduate courses including STAT 6510 and one of STAT 6500 or STAT 6560 as well as the series STAT 697 A/B or the completion of an additional 3 credit hour graduate course from the list below (courses STAT 6509 and STAT 6519 cannot be used to satisfy this requirement). . A thesis is required as per General Regulations, Theses and Reports.
Students who already hold a Master of Applied Statistics are only required to complete STAT 6510 and one of STAT 6500 or STAT 6560 and a thesis as per General Regulations, Theses and Reports.

Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses
(Credit may be obtained for only one course from each of the pairs listed in this table.)

| Present Course | Former Course | Present Course | Former Course |
| :--- | :--- | :--- | :--- |
| 6323 | 6030 | 6212 | 6080 |
| 6321 | 6032 | 6310 | 6130 |
| 6322 | 6035 | 6330 | 6200 |
| 6340 | 6040 | 6331 | 6210 |
| 6341 | 6041 | 6332 | 6350 |
| 6342 | 6042 | 6312 | 6500 |

### 27.18.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.

### 27.18.3.1 Mathematics

6100 Dynamical Systems
6101 Modern Perturbation Theory
6102 Mathematical Biology
6104 Infinite Dimensional Dynamical Systems
6110 Advanced General Relativity
6111 Calculus in Manifolds
6112-6119 Special Topics in Applied Mathematics
6120 Theoretical Fluid Dynamics
6121 Functional Differential Equations
6130 Introduction to General Relativity
6160 Partial Differential Equations
6201 Numerical Methods for Partial Differential Equations

6202 Nonlinear and Linear Optimization (credit restricted with Computer Science 6933)
6204 Iterative Methods in Numerical Linear Algebra
6205-6209 Special Topics in Numerical Analysis
6210 Numerical Solution of Differential Equations
6212 Numerical Methods for Initial Value Problems
6230 Differentiable Manifolds and Riemannian Geometry
6299 Master's Project
6300 Homology Theory
6301 Homotopy Theory
6302 Theory of Fibre Bundles
6304-6309 Special Topics in Topology
6310 Functional Analysis
6311 Complex Analysis
6312 Measure Theory
6313 Functional Analysis II
6315-6319 Special Topics in Analysis
6320 Group Theory
6321 Ring Theory
6322 Nonassociative Algebra
6323 Homological Algebra
6324-6329 Special Topics in Algebra
6330 Analytic Number Theory
6331 Algebraic Number Theory
6332 Point Set Topology
6340 Graph Theory
6341 Combinatorial Design Theory
6342 Advanced Enumeration
6343-6349 Special Topics in Combinatorics
6351 Advanced Linear Algebra
696A/B Graduate Seminar (2 credit hours)

### 27.18.3.2 Statistics

6500 Probability (credit restricted with former 6586)
6503 Stochastic Processes
6505 Survival Analysis
6510 Mathematical Statistics
6520 Linear Models
6530 Longitudinal Data Analysis
6540 Time Series Analysis
6545 Computational Statistics
6550 Nonparametric Statistics
6559 Statistical Exploration of Data
6560 Continuous Multivariate Analysis
6561 Categorical Data Analysis
6563 Sampling Theory
6564 Experimental Designs
6571 Financial and Environmental Time Series
6573 Statistical Genetics
6570-6589 Selected Topics in Statistics and Probability (excluding 6571, 6573, 6586)
697A/B Graduate Seminar Series in Statistics (2 credit hours)

### 27.19 Physics and Physical Oceanography

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/physics
Programs leading to the Degree of Master of Science in Physics and in Physical Oceanography are offered to both full and part-time students. The following Departmental Regulations are supplementary to the General Regulations governing the M.Sc. degrees.

### 27.19.1 Program of Study for Master of Science in Physical Oceanography

1. Preference for admission will be given to students with a B. Sc. Honours Degree who have taken senior undergraduate courses in fluids, oceanography, and mathematical physics.
2. Students are normally required to take a minimum of 12 credit hours in graduate level courses, of which at least 6 credit hours shall be selected from among the courses listed in Courses below between the numbers 6300-6399.
3. Before submission of the thesis to the School of Graduate Studies for examination, the student must present a seminar on the topic of his/her thesis research.

### 27.19.2 Program of Study for Master of Science in Physics

1. Preference for admission will be given to students with a B. Sc. Honours Degree in physics. Students should normally have taken senior undergraduate courses in physics, such as electricity and magnetism, statistical physics, quantum mechanics, or experimental physics.
2. Students are normally required to take a minimum of 12 credit hours in graduate level courses, of which at least 6 credit hours shall be selected from Courses below.
3. Before submission of the thesis to the School of Graduate Studies for examination, the student must present a seminar on the topic of his/her thesis research.

### 27.19.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Condensed Matter Physics I
6001 Condensed Matter Physics II
6002 Superconductivity
6003 Path Integral Techniques in Condensed Matter Physics
6010-19 Special Topics in Condensed Matter Physics
6040 Biophysics
6060-69 Special Topics in Interdisciplinary Areas
6200 Nonlinear Dynamics
6308 Ocean Dynamics I
6309 Ocean Dynamics II
6310 Physical Oceanography
6313 Physical Fluid Dynamics
6314 Field Oceanography
6315 Polar Oceanography
6316 Ocean Measurements and Data Analysis
6317 Ocean Acoustics
6318 Numerical Modelling
6319 Climate Dynamics
6320 Turbulence
6321 Coastal Oceanography
6322 Stratified Fluids
6323 Stability Theory
6324 Models in Ocean Ecology
6360-69 Special Topics in Physical Oceanography (excluding 6363)
6363 Laboratory Experiments in Geophysical Fluid Dynamics
6400 Statistical Mechanics
6402 Theory of Phase Transitions
6403 Stochastic Processes, Time-Dependent and Non-equilibrium Statistical Mechanics
6413 Soft Matter Physics
6502 Electrodynamics
6722 Light Scattering Spectroscopy
6760-69 Special Topics in Atomic and Molecular Physics
6800 Group Theory
6810-19 Special Topics in Theoretical and Mathematical Physics 6850 Quantum Mechanics I
6851 Quantum Mechanics II
6900 Techniques in Experimental Condensed Matter Physics
6910-19 Special Topics in Experimental and Applied Physics
Note: For Geophysics, see Earth Sciences.

### 27.20 Psychology


www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science www.mun.ca/psychology
The Degree of Master of Science is offered in Experimental Psychology. The Degree of Doctor of Philosophy is offered in Experimental Psychology. Interested students may wish to consult the sections in the Calendar describing the Master of Applied Psychological Science (Co-operative) and the Master of Science and Doctor of Philosophy in Cognitive and Behavioural Ecology programs.

### 27.20.1 Program of Study

A student may be accepted into a program leading to the M.Sc. in Experimental Psychology.

## Experimental Psychology

1. The areas of specialization offered are: Animal Behaviour (see Cognitive and Behavioural Ecology Program), Behavioural Neuroscience and Clinical, Cognitive, Developmental and Social Psychology.
2. Students shall normally complete 15 credit hours, including: Advanced Statistics in Psychology (6000), Research Design (6001), and 6 credit hours related to their area of specialization. Students will also register for the Colloquium Series in Psychology (6010) each Fall and Winter semester of their program for a maximum of four registrations.
3. Every student shall submit an original thesis based upon an approved experimental research topic.

### 27.20.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Advanced Statistics in Psychology
6001 Research Design
6010 Colloquium Series in Psychology (repeatable, non-credit)
6100-6130 Special Topics in Experimental Psychology
6200 Learning I
6201 Learning II
6203 Behavioural Pharmacology
6210 Behavioural Analysis of Toxins
6351 Behavioural Ecology and Sociobiology (cross-listed as CABE 6351)
6400 Theory and Methods in Social Psychology
6401 Social Cognition
6402 Group Processes

6403 Program Evaluation and Applied Research
6404 Project in Applied Psychological Science (Note: This course is open only to students in the Master of Applied Psychological Science)
6500 Developmental Psychology I
6501 Developmental Psychology II
6502 Developmental Changes During Old Age
6700 Perception
6710 Human Information Processing
6720 Human Memory
6800 Behavioural Neuroscience I
6801 Behavioural Neuroscience II
6810 Psychometrics
6910 Personality
699A/B Core Graduate Seminar in Psychology

### 27.21 Scientific Computing

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science

### 27.21.1 Administrative Committee

The Administrative Committee, appointed by the Dean of the School of Graduate Studies on the recommendation of the Dean of the Faculty of Science, consists of at least one representative of each participating academic unit, and one member external to the University.

### 27.21.2 Participating Departments and Organizations

This interdisciplinary program offers the Master of Science Degree in both Scientific Computing and Scientific Computing (Co-operative). The departments of Biochemistry, Chemistry, Computer Science, Earth Sciences, Mathematics and Statistics, Physics and Physical Oceanography and the Faculty of Engineering and Applied Science are participants in this program. Other departments and faculties may be involved, depending on the nature of the thesis or project. External organizations may provide placements for co-op students, jointly supervise students, share computing resources and participate in teaching coutses.

### 27.21.3 Admission Criteria and Procedures

1. The criteria for acceptance of an applicant are: the applicants' anticipated successful and timely completion of the program, and the willingness of a participating faculty member to supervise the applicant.
2. Students will be expected to hold a B.Sc. (Honours) or B.Eng. Degree with honours standing, or equivalent, with a strong computational orientation. At the time of application, the student is expected to provide evidence (for example, transcripts of completed courses) of the student's knowledge of a modern computer language such as Fortran, and/or C and/or C++, and/or Matlab, and/or Python. Evidence of knowledge of differential equations; and/or linear algebra and/or computer graphics would be an asset. Students with an inadequate background may be encouraged to take certain undergraduate courses.
3. Admission decisions will be made by the School of Graduate Studies on the recommendation of the Chair of the Administrative Committee.

### 27.21.4 Program of Study

1. The goal of Scientific Computing is to solve technical problems, in science and engineering, using computers and computational methods. Our program is designed to educate students to apply computational, numerical and programming concepts and tools to solve and model complex problems in science and engineering.
2. The Program is offered in thesis and project (non-thesis) versions, with the option of a co-operative education program. It is intended that the overall level of student effort and performance required in each version will be comparable. The normal length of time to complete each option is 24 months.
3. The work for the thesis or project will be carried out under the guidance of a supervisor (or joint supervisors). The home department of the student will be the same as that of the Supervisor. Upon completion of the work for the thesis or project, each student is required to present a seminar suitable for the interdisciplinary audience of Scientific Computing program students.
4. All students are required to complete a minimum of 3 core courses ( 9 credit hours) selected from the list of Core Courses listing below. All students are also recommended to complete CMSC 6950. Additional courses are required in accordance with the program options as outlined below and will normally be selected from the student's discipline of specialization. The course requirements for each student are approved by the Program Chair on the recommendation of the student's supervisor(s), and should reflect the interdisciplinary nature of the program. Students are expected to attend research seminars in their home department as well as those relevant to Scientific Computing, when advertised.
a. The thesis option requires the completion of a minimum of four graduate courses ( 12 credit hours) numbered 6000 or higher, which must include three courses ( 9 credit hours) from the Core Courses listing below. Equivalent courses may be considered for substitution with approval of the Program Chair. The additional course(s) will normally be chosen from the Additional Courses listing below in the same discipline as the thesis work. The submission of an acceptable thesis is required. The thesis is to contain an original scholarly contribution which must be submitted to the School of Graduate Studies for final examination. The thesis must be written in a format according to procedures outlined in Guidelines for Theses and Reports by the School of Graduate Studies at www.mun.ca/sgs/go/guid_policies/theses.php.
b. The project option requires the completion of a minimum of eight graduate courses ( 24 credit hours) numbered 6000 or higher, which must include CMSC 6009 and at least three courses ( 9 credit hours) from the Core Courses listing below. Equivalent courses may be considered for substitution with approval of the Program Chair. The additional courses will normally be chosen from the Additional Courses listing below in the same discipline as the project work. An acceptable project report is also required that is based on research performed with the guidance of the student's supervisor. The project, which will include an indepth written report, shall require the equivalent of at least one and no more than two semesters of full time work. The project report must be written in a format according to procedures outlined in Guidelines for Theses and Reports by the School of Graduate Studies at www.mun.ca/sgs/go/guid_policies/theses.php. The report will be evaluated by the student's supervisor, by the Chair of the Board of Study (or delegate), as well as by one other faculty member. Acceptance of a final version of the report (and a passing grade for CMSC 6009) requires the agreement of the three examiners.

### 27.21.5 Co-operative Education Option

1. A co-operative education option will be available to students who are accepted into the M.Sc. program. Students in this option may follow the thesis or non-thesis version of the program. It is expected to take up to 24 months to complete.
2. Students will normally declare their intention to complete the co-operative education option at the start of the second semester of their academic program.
3. Students will complete two work terms consecutively, normally following the successful completion of a minimum of four courses (12 credit hours).
4. The dates for starting and finishing each work term are shown in the University Diary.
5. A competition for work term employment is organized by Co-operative Education in cooperation with a designated faculty member from Scientific Computing. Students may also obtain their own work term jobs outside the competition. Such jobs must be confirmed by letter from the employer and approved by the Chair of Scientific Computing and by Co-operative Education on or before the first day of the work term. Work term jobs may be outside St. John's and possibly outside Newfoundland and Labrador. Students who do not wish to accept a work term job arranged by Co-operative Education shall be responsible for finding an acceptable alternative. By entering the competition, students give permission for Co-operative Education to supply their Memorial University of Newfoundland transcripts and resumes to potential employers.
6. Each work term placement will be supervised by the student's program supervisor, the on-site supervisor assigned by the employer and Co-operative Education. The overall evaluation of the work term is the responsibility of the program Supervisor, on-site Supervisor, and Co-operative Education. The work term shall consist of two components:

- On-the-job Student Performance as evaluated by the on-site supervisor and Co-operative Education, in consultation with the program supervisor.
- A Work Report graded by Co-operative Education and the program supervisor in consultation with the on-site supervisor.

7. Evaluation of the work term will result in the assignment of one of the following final grades:

- Pass with Distinction: Indicates OUTSTANDING PERFORMANCE in both the work report and work performance.
- Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and work performance.
- Fail: Indicates FAILING PERFORMANCE in the work report and/or the work performance. If a student fails to achieve a final grade of Pass or Pass with Distinction, and provided the student has not failed to achieve a grade of 'B' or better in any program course, the student may request to repeat the work term component. The request will be considered by the Chair of Scientific Computing in consultation with the program supervisor and Co-operative Education. Only one repetition of a work term will be permitted in the student's program.

8. Following the completion of the two work terms, each student must complete any remaining course requirements and project report or thesis. Assuming that prior written authorization of the employer and the supervisory committee was obtained and submitted to the School of Graduate Studies, students may include material from the work terms in their reports or theses. For students following the non-thesis version of the program, the two work-term reports may be combined into a single, integrated report for this purpose. All other students must write a thesis on a research project which may be based on research completed during the work terms.
9. Students who are accepted into the co-op option are not guaranteed placements. In the event that a student fails to obtain two semesters of placements, but successfully completes all other requirements of the Degree, the student will still be eligible for graduation, but without the designation of a co-op degree.

### 27.21.6 Courses

### 27.21.6.1 Core Courses

Computer Science 6731 Topics in Numerical Methods
Mathematics 6201 Numerical Methods for Partial Differential Equations
Mathematics 6210 Numerical Solutions of Differential Equations
Scientific Computing 6009 Master's Project
Scientific Computing 6910 Matrix Computations and Applications or Computer Science 6931 Matrix Computations and Applications (credit may be obtained for only one of the CMSC 6910, COMP 6732, and COMP 6931)
Scientific Computing 6920 Applied Scientific Programming
Scientific Computing 6930 Algorithms for Distributed and Shared Memory Computers
Scientific Computing 6950 Computer Based Tools and Applications (credit may be obtained for only one of CMSC 6950 and the former CMSC 6940)

### 27.21.6.2 Additional Courses

The following courses are identified as suitable for students in this program. Other courses may be permitted with the approval of the Program Chair.

## Biochemistry

6000-6009 Special Topics in Biochemistry
6010-6019 Special Topics in Nutrition and Metabolism
6020-6029 Special Topics in Food Science
6400 Control of Intermediary Metabolism
6460 Structural Biochemistry
6520 Nutritional Biochemistry
6530 Food Biochemistry
6590 Cellular, Molecular and Developmental Biology (credit restricted with Biology 6590 and Medicine 6590)
6630 Marine Biochemistry
6680 Processing and Quality of Foods

## Chemistry

6201 Bioinorganic Chemistry
6204 Mechanisms in Catalysis
6205 Photochemistry of Transition Metal Complexes
6210 Organometallic Chemistry
6300 Quantum Chemistry I
6301 Quantum Chemistry II
6302 Molecular Spectroscopy

6304 Computational Chemistry I
6310 Electronic Structure Theory
6323 Chemical Thermodynamics I
6324 Chemical Thermodynamics II
6340 Biophysical Chemistry
6350 Electrochemical Kinetics
6360 Solid State Chemistry
6380 Adsorption on Surfaces
6381 Surface and Interface Science
6382-6389 Selected Topics in Physical Chemistry
6390-6398 Selected Topics in Physical Chemistry
6399 Chemical Kinetics and Dynamics
6401 Organic Spectroscopic Analysis I
6402 Organic Spectroscopic Analysis II
6470 Physical Organic Chemistry
6590-6599 Selected Topics in Theoretical and Computational Chemistry
6600 Applications of Inorganic and Organometallic Chemistry to Toxicology

## Computer Science

6904 Advanced Computer Architectures (credit may be obtained for only one of 6904 and the former 6722)
6905 Software Engineering (credit may be obtained for only one of 6905 and the former 6713)
6906 Numerical Methods (credit may be obtained for only one of 6906 and the former 6731)
6909 Fundamentals of Computer Graphics (credit may be obtained for only one of 6909 and the former 6752)
6918 Digital Image Processing (credit may be obtained for only one of 6918 and the former 6756)
6931 Matrix Computations and Applications (credit may be obtained for only one of 6931, the former 6732, and CMSC 6910)

## Earth Sciences

6141 Rotation of the Earth
6142 Theory of Global Geodynamics
6171 Advanced Exploration Seismology
6172 Borehole Seismic
6175 Gravity and Magnetic Methods
6177 Mathematical Formulations of Seismic Wave Phenomena
6918 Airborne and Borehole Electromagnetic Methods
6994 Special Topics in Earth Sciences - Geophysical Inversion and Applications
7110 Physics of the Solid Earth
7120 Crustal Geophysics
Engineering and Applied Science
9015 Ocean Engineering Hydrodynamics
9052 Ice Properties and Mechanics
9501 Finite Element Analysis with Engineering Applications
9713 Stochastic Hydrology
9815 Electromagnetic Propagation
9821 Digital Signal Processing
9826 Advanced Control Systems
9861 High-Performance Computer Architecture
9865 Advanced Digital Systems
9869 Advanced Concurrent Programming
9871 Information Theory and Coding

## Mathematics and Statistics

6112-6119 Special Topics in Applied Mathematics
6201 Numerical Methods for Partial Differential Equations
6210 Numerical Solution of Differential Equations (required course for Scientific Computing)
6212 Numerical Methods for Initial Value Problems
6588 Selected Topics in Statistics and Probability - Generalized Additive Models with Applications in Scientific Visualization
Physics and Physical Oceanography
6000 Condensed Matter Physics I
6200 Nonlinear Dynamics
6308 Ocean Dynamics 1
6309 Ocean Dynamics II
6310 Physical Oceanography
6316 Ocean Measurements and Data Analysis
6317 Ocean Acoustics
6318 Numerical Modelling
6320 Turbulence
6321 Coastal Oceanography
6323 Stability Theory
6400 Statistical Mechanics
6402 Theory of Phase Transitions
6800 Group Theory
6850 Quantum Méchanics I

## Scientific Computing

## 601W Work Term 1

602W Work Term 2
6910 Matrix Computations and Applications (credit may be obtained for only one of CMSC 6910, the former COMP 6732, and 6931)
(cross-listed with COMP 6931)
6920 Applied Scientific Programming
6925 Tools of the Trade for Programming High Performance Computers (2 credit hours)
6930 Algorithms for Distributed and Shared Memory Computers
6950 Computer Based Tools and Applications (credit may be obtained for only one of CMSC 6950 and the former CMSC 6940)

## 28 <br> Regulations Governing the Degree of Master of Science in Boreal Ecosystems and Agricultural Sciences

www.mun.ca/sgs/contacts/sgscontacts.php
www.grenfell.mun.ca/academics-and-research/Pages/graduate-programs.aspx
The Degree of Master of Science in Boreal Ecosystems and Agricultural Sciences (M.Sc. (Boreal Ecosystems and Agricultural Sciences)) is offered by the School of Science and the Environment, Grenfell Campus to full-time and part-time students in Boreal Ecosystems and Agriculture research areas focussed on, but not exclusively to, Economics and Social Science, Plant Sciences, Soil and Land Resource, and Water Resources.

### 28.1 Qualifications for Admission

To be considered for admission, applicants shall hold a Bachelor's (Honours) degree normally in Science, Agriculture, Forestry, Engineering, Geography, or Environmental Science with at least second class standing, or equivalent, from an institution recognized by the Senate or shall have qualifications and/or experience in environmental science acceptable to the Dean of Graduate Studies and the Grenfell Campus graduate committee. The Grenfell Campus graduate committee makes recommendations on admission to the Dean of Graduate Studies for this program.
Admission is limited and competitive, and will follow the general qualifications for admission to Masters Programs at Memorial University of Newfoundland as set out under General Regulations, Qualifications for Admission of the School of Graduate Studies. All applicants found academically acceptable to the Master of Science in Boreal Ecosystems and Agricultural Sciences program are required to have a faculty supervisor before final acceptance can be offered.
As well, applicants are required to demonstrate English proficiency by submission of a minimum score in TOEFL, IELTS, or another acceptable language test, in accordance with General Regulation, Qualifications for Admission, English Language Proficiency Requirements of the School of Graduate Studies.

### 28.2 Program of Study and Research

1. The program of study for the Master of Science in Boreal Ecosystems and Agricultural Sciences degree shall consist of the successful completion of a program of courses and a thesis embodying original research.
2. Every student shall successfully complete at least 12 credit hours as outlined under Program Requirements below. Undergraduate courses at the fourth year level may be required at the recommendation of the supervisory committee; these courses do not count against the required graduate credit requirements but are necessary for graduation.
3. Every student shall submit a thesis, as outlined under General Regulations, Theses and Reports, on an approved subject in which systematic research has been conducted under the direction of the Supervisor recommended by the academic unit concerned and approved by the Divisional Head.
4. In addition to courses and thesis research, it is a requirement that all graduate students of this program must participate in Grenfell campus-wide graduate student seminars. This is graded by supervisor(s) for participation as satisfactory/unsatisfactory; a satisfactory evaluation is required for graduation.

### 28.3 Program Requirements

1. Students admitted to the program must complete a research thesis under the supervision of a faculty member or members, and a minimum of four courses (12 credit hours) as determined by the thesis supervisor. Three courses are selected from four core courses. A fourth course can be selected from a list of optional courses.
2. All students must complete three core courses

- BEAS 6000 - Issues in Boreal Ecosystems and Agricultural Sciences (3 credit hours). This course will initially be offered during the Fall semester.
- BEAS 600A/B - Graduate Research Seminar (3 credit hours). Students will normally register for BEAS 600A in the Fall semester and BEAS 600B in the following Winter semester. A grade of NC (No Grade Expected) will be assigned to BEAS 600A.

3. Students must also complete one of the two following courses: BEAS 6002 - Advanced Quantitative Research Methods for the Natural Sciences or BEAS 6003 - Advanced Quantitative Research Methods for the Social Sciences (3 credit hours).
4. A further 3 credit hours will be accumulated in elective courses related to the student's research area. Students should view Table $\mathbf{1}$ Research Areas and Sample Elective Courses for suggestions.

Table 1 Research Areas and Sample Elective Courses

| Economics \& Social Science | Plant Science | Soil and Land Resource | Water Resources |
| :---: | :---: | :---: | :---: |
| BEAS 6010 Agriculture and Forestry Economics | BEAS 6020 Management of Crop Nutrition BEAS 6021 Organic Farming for Sustainable Agriculture BEAS 6022 Plant Biochemistry BEAS 6023 Plant Physiology | BEAS 6030 Chemical Speciation Modeling for Environmental Matrices <br> BEAS 6031 Soil Functions: Soil as a Bioreactor <br> BEAS 6032 Environmental Soil Physics <br> BEAS 6033 Soil and Water Conservation | BEAS 6040 Advanced Groundwater Management BEAS 6041 Applied Hydrology BEAS 6042 Soil and Groundwater Remediation |

### 28.4 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree, a student shall obtain an A or B grade in each program course as outlined under General Regulations, Evaluation, Evaluation of Graduate Students.
2. When it has been determined, on the basis of consultation with the student, the instructors in graduate courses, and the thesis Supervisor, that a student's work has fallen below a satisfactory level, the Supervisor or the Head of the appropriate academic unit may recommend to the Divisional Head that such a student be required to withdraw from the program as outlined under General Regulations, Evaluation, Evaluation of Graduate Students.

### 28.5 Courses

BEAS 6000 Issues in Boreal Ecosystems and Agricultural Sciences
BEAS 600A/B Graduate Research Seminar
BEAS 6002 Advanced Quantitative Research Methods for the Natural Sciences
BEAS 6003 Advanced Quantitative Research Methods for the Social Sciences
BEAS 6010 Agriculture and Forestry Economics
BEAS 6020 Management of Crop Nutrition
BEAS 6021 Organic Farming for Sustainable Agriculture
BEAS 6022 Plant Biochemistry
BEAS 6023 Plant Physiology
BEAS 6030 Chemical Speciation Modeling for Environmental Matrices
BEAS 6031 Soil Functions Soil as a Bioreactor
BEAS 6032 Environmental Soil Physics
BEAS 6033 Soil and Water Conservation
BEAS 6040 Advanced Groundwater Management
BEAS 6041 Applied Hydrology
BEAS 6042 Soil and Groundwater Remediation
BEAS 6050-6150 Special topics in Boreal Ecosystems and Agricultural Sciences

## 29 Regulations Governing the Master of Science in Fisheries Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mi.mun.ca
The Degree of Master of Science in Fisheries Science is a research-focused Master's degree offered by the School of Fisheries, at the Fisheries and Marine Institute. The Degree of Master of Science in Fisheries Science is offered in Fisheries Science and Technology and Stock Assessment.
An Academic Advisory committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). This committee will consist of an Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University. Normally, all appointments will be for a period of three years.
In addition to meeting the regulations governing the Degree of Master of Science in Fisheries Science, students must also meet the General Regulations of the School of Graduate Studies and any additional requirements of the appropriate academic unit.

### 29.1 Fisheries Science (Fisheries Science and Technology)

The Degree of Master of Science in Fisheries Science (Fisheries Science and Technology) is a research-focused Master's degree offered by the School of Fisheries at the Fisheries and Marine Institute. This program is for students who aim to pursue a career in fisheries science, and includes skills training that will empower students to conduct publication-quality research in any aspect of fisheries science. The degree is normally offered to full-time students. These regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 29.1.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission an applicant will normally hold at least a high second class Honours Degree, or an M.D. Degree, or the equivalent of either, both in achievement and depth of study, from an institution recognized by the University Senate.
2. Any other applicant may be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least a grade of 'B' in courses in the proposed field of specialization;
b. the applicant's overall undergraduate record after the first year shows an average of at least a grade of 'B' in all courses taken; and
c. the applicant demonstrates a commitment and passion for aquatic science, ideally in fisheries, through employment or experience in field schools, research programs, the fishing industry, regulatory agencies or government departments, nongovernmental organizations, consulting activities, or other relevant activities.
3. Applicants must meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

### 29.1.2 Program of Study and Research

Every student for the Master of Science in Fisheries Science (Fisheries Science and Technology) degree shall normally be required to complete all of

1. 12 credit hours including:
a. FISH 6000 Science Communication for Fisheries FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
FISH 6002 Data Collection, Management, and Display FISH 6003 Statistics and Study Design for Fisheries Science
b. A thesis composed of at least one chapter of original research.
2. A student may be required by the Supervisory Committee to take additional courses.
3. All program course requirements should be completed within four semesters from the date of first registration in the M.Sc. degree program. Students will normally complete course requirements in their first two semesters.
4. Within three months of the first registration in the M.Sc. degree program, the student will meet with the Supervisory Committee. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the student and to the Dean of Graduate Studies. Subsequent meetings must occur at least annually, with a report filed after each meeting.
5. The student must present the thesis seminar of 20-30 minutes duration prior to submission of the thesis to the School of Graduate Studies.
6. The thesis shall conform to the School of Graduate Studies General Regulations, Thesis and Reports.

### 29.1.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree a student shall obtain a grade of ' A ' or ' B ' in each program course as per General Regulations, Evaluation, Evaluation of Graduate Students.
2. The Supervisor and the Supervisory Committee may recommend that a student be required to withdraw from the program, if after consultation with the student, it is determined that the student is not making satisfactory progress towards completion of the program and unsatisfactory progress is unlikely to be corrected.

### 29.1.4 Thesis

A student must meet the requirements as outlined under the School of Graduate Studies General Regulations, Thesis and Reports.

### 29.1.5 Courses

FISH 6000 Science Communication for Fisheries
FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
FISH 6002 Data Collection, Management, and Display
FISH 6003 Statistics and Study Design for Fisheries Science

### 29.2 Fisheries Science (Stock Assessment)

The Degree of Master of Science in Fisheries Science (Stock Assessment) is a research-focussed Master's degree offered by the School of Fisheries at the Fisheries and Marine Institute. This program is for students who aim to pursue a specific career in quantitative stock assessment of fisheries. The Degree is normally offered to full-time students. These regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 29.2.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission an applicant will normally hold at least a high second class Honours Degree, or an M.D. Degree, or the equivalent of either, both in achievement and depth of student, from an institution recognized by the University Senate.
2. Applicants must be able to demonstrate a satisfactory knowledge of mathematics, statistics, and scientific computing.
3. Any other applicant may be considered for admission provided that:
a. the applicant's undergraduate record after the first year shows an average of at least a grade of ' $B^{\prime}$ in courses in the proposed field of specialization;
b. the applicant's overall undergraduate record after the first year shows an average of at least a grade of ' $B$ ' in all courses taken, and;
c. the applicant demonstrates a commitment and passion for mathematics or statistics, through employment or experience in field schools, research programs, regulatory agencies or government departments, non-governmental organizations, consulting activities, or other relevant activities.
4. Applicants must meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

### 29.2.2 Program of Study and Research

Every student for the Master of Science in Fisheries Science (Stock Assessment) degree shall normally be required to complete all of:

1. 12 credit hours including:
a. FISH 6000 Science Communication for Fisheries FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries FISH 6004 Overview of Statistical Stock Assessment FISH 6005 Advanced Statistical Stock Assessment
b. A thesis composed of at least one chapter of original research.
2. A student will normally complete course requirements in the first four semesters of the program.
3. Within three months of the first registration in the M. Sc. degree program, the student will meet with their Supervisory Committee. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the student and to the Dean of Graduate Studies. Subsequent meetings must occur at least annually, with a report filed after each meeting.
4. A student may be required by the Supervisory Committee to take additional courses.
5. The student must present the thesis seminar of 20-30 minutes duration prior to submission of the thesis to the School of Graduate Studies.
6. The thesis shall conform to the School of Graduate Studies General Regulations, Thesis and Reports.

### 29.2.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree a student shall obtain a grade of 'A' or 'B' in each program course as per General Regulations, Evaluation, Evaluation of Graduate Students.
2. The Supervisor and the Supervisory Committee may recommend that a student be required to withdraw from the program, if after consultation with the student, it is determined that the student is not making satisfactory progress towards completion of the program and the unsatisfactory progress is unlikely to be corrected.

### 29.2.4 Thesis

A student must meet the requirements as outlined under the School of Graduate Studies General Regulations, Thesis and Reports.

### 29.2.5 Courses

FISH 6000 Science Communication for Fisheries
FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries

## 30 Regulations Governing the Degree of Master of Science in Kinesiology

## www.mun.ca/sgs/contacts/sgscontacts.php <br> www.mun.ca/hkr

The Degree of Master of Science in Kinesiology (M.Sc. (Kinesiology)) is offered to qualified full-time and part-time students by the School of Human Kinetics and Recreation. The General Regulations of the School of Graduate Studies of Memorial University of Newfoundland outlined in the current Calendar, and the Degree Regulations of the School of Human Kinetics and Recreation outlined below will apply to the Master of Science in Kinesiology program.

### 30.1 Qualifications for Admission

1. The admission requirements for the Master of Science in Kinesiology are as given under the General Regulations of the School of Graduate Studies. Admission is limited and competitive. The deadline for receipt of applications is April 1 for admission into the subsequent Fall semester. Preference for admission may be given to students with undergraduate degrees in relevant disciplines, with a minimum overall B average. Applications submitted through the School of Graduate Studies will be evaluated by the Graduate Studies Committee of the School of Human Kinetics and Recreation. Admission of a student to the program shall be made by the Dean of Graduate Studies.
2. Only in exceptional circumstances, and only on the recommendation of the Dean of the School of Human Kinetics and Recreation, shall the Dean of Graduate Studies consider applicants who do not meet the requirements above.

### 30.2 Program and Degree Requirements

1. The Degree of Master of Science in Kinesiology is offered in the areas of Biomechanics/Ergonomics, Exercise and Work Physiology, Psychology of Sport, Exercise and Recreation, and Socio-cultural Studies of Physical Activity and Health.
2. The program of a student for the Master of Science in Kinesiology shall be the responsibility of the Supervisory Committee, composed of the Supervisor and at least one other faculty member recommended with the concurrence of the Supervisor by the Dean of the School, or delegate.
3. Students for the Master of Science in Kinesiology shall be required to complete a minimum of 12 credit hours plus a thesis. Either HKR 6000 or HKR 6001 is normally required for all students. In addition, all on-campus students shall be required to complete four semester-length seminars represented by registration and successful completion of HKR 6314 (a non-credit, repeatable course) in each of four semesters during their tenure in the program. Off-campus or part-time students who cannot attend the on-campus seminar series can substitute 24 hours of participation in (over their two-year tenure) and one presentation at national, provincial or regional conferences, workshops, professional development seminars, or equivalent activities. The remaining course requirements will be selected, in agreement with the Supervisory Committee, to reflect the kinesiology areas of specializations offered with the School.
4. It is the responsibility of the student to arrange regular meetings with their supervisory committee. An annual report, prepared by the Supervisor and signed by all members of the Supervisory Committee and the student, is submitted to the Dean of the School of Human Kinetics and Recreation (or delegate) as required by the School of Graduate Studies.
5. Depending on the background of the student or the student's area of intended specialization, a student's program may be modified. Such modifications may include a reduction in course requirements where a student demonstrates that the student brings graduate level competency to their program in specific areas, or may include additional graduate or undergraduate courses, as specified by the student's Supervisory Committee. A minimum of three courses or 9 credit hours completed in the School of Human Kinetics and Recreation is mandatory.
6. A student completing a Master of Science in Kinesiology will be required to present a thesis proposal for the student's proposed thesis normally by the end of the third semester of study. The thesis proposal shall normally consist of a full written proposal (including literature review) submitted to the Supervisory Committee, a summary to be distributed to graduate students and faculty one week prior to the presentation and a formal presentation normally at the seminar series. The student may be questioned on the student's proposal by the Supervisory Committee and seminar audience. Any deficiencies noted during the presentation should be carefully considered by the student and the Supervisory Committee prior to proceeding with the thesis.
7. All graduate students are expected to attend and participate in the School of Human Kinetics and Recreation seminars and thesis proposal presentations.
8. In conjunction and collaboration with other Faculties and Schools of Memorial University of Newfoundland, students may pursue their special interests through electives from departments/schools outside the School of Human Kinetics and Recreation. These courses must be approved by the Graduate Studies Committee and the Dean of Graduate Studies in the preceding semester.
9. Students may apply for transfer course credits. All course transfers require the approval of the Dean of Graduate Studies, on the recommendation of the Dean of the School of Human Kinetics and Recreation, and are subject to General Regulation Program Requirements, Transfer of Course Credits of the School of Graduate Studies.

### 30.3 Evaluation

1. In order to continue as a student for a Master of Science in Kinesiology Degree, a student who receives a final grade of 'C' or less in a program course must repeat that course and obtain a minimum grade of ' B '. In the case of an elective course a suitable replacement course, acceptable to the Graduate Studies Committee of the School of Human Kinetics and Recreation, may be substituted for the failed course. Only one such repetition/replacement shall be permitted in the student's graduate program. Should a grade of lower than ' $B$ ' be obtained in the repeated course/replacement course, or any other program course, the student shall be required to withdraw from the program.
2. When the Graduate Studies Committee of the School of Human Kinetics and Recreation has determined, through consultation with the student, the instructors of graduate courses and the program advisor or thesis Supervisor that the student's work has fallen below satisfactory level, it may request that the Dean of the School of Human Kinetics and Recreation recommend to the Dean of Graduate Studies that the student's program be terminated.

### 30.4 Period of Study

The period of study for a graduate program shall not normally exceed seven years beyond first registration.

1. A student in full-time attendance may register for a maximum of 12 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.
2. A student in part-time attendance may register for a maximum of 3 credit hours in any semester, including intersession or summer session.

### 30.5 Thesis

The School of Graduate Studies General Regulation describes the requirements in Theses and Reports.

### 30.6 Courses

6000 Quantitative Research Methods
6001 Qualitative Research Methods
6003 Physical Education, Culture and Society
6111 Canadian Delivery Systems in Physical Education, Recreation and Sport
6120 Curriculum Development in Physical Education
6121 Physical Education Leadership
6122 Comprehensive School Health
6123 Coaching and Long-term Athlete Development
6124 Adapted Physical Activity
6130 Computer Applications for Physical Activity Measurement and Intervention
6201 Foundations of Sport Psychology and Mental Training Techniques
6202 Intervention and Enhancement Techniques in Mental Training Consultation
6203 Sport Psychology Consulting
6310 Exercise Physiology I
6314 Graduate Seminar Series (repeatable, non-credit)
6320 Exercise Physiology II
6330 The Application and Implementation of Kinesiology Technologies
6340 Occupational Biomechanics
6350 Human Error in Complex Work Systems
6360 Knowledge Translation: Applications to Ergonomics and Occupational Health and Safety
6370 Movement and Neural Science
6410 Sport and Society
6500 Introduction to Research in Physical Education
6710-6719: Individual Reading and Research in Special Areas of Exercise and Work Physiology
6720-6729: Individual Reading and Research in Special Areas of Biomechanics and Ergonomics
6730-6739: Individual Reading and Research in Special Areas of Psychology of Sport, Exercise and Leisure

## 31 Regulations Governing the Degree of Master of Science in Management

www.mun.ca/sgs/contacts/sgscontacts.php www.business.mun.ca
The Degree of Master of Science in Management is a research-focused Master's degree offered by the Faculty of Business Administration. The Degree is offered to full-time students in four areas in management: (1) General Management; (2) Human Resources Management/Organizational Behavior; (3) Information Management; and (4) Operations Management. These regulations must be read in conjunction the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

### 31.1 Qualifications for Admission

Admission is limited and competitive. General qualifications for admission to Masters Programs at Memorial University of Newfoundland are set out under General Regulations, Qualifications for Admission. In addition, the following admission requirements will apply:

1. A Graduate Management Admissions Test (GMAT) score of at least 600. A Graduate Records Examinations (GRE) score of at least 310 will be accepted in lieu of GMAT scores.
2. An applicant who did not complete a four-year baccalaureate degree at a recognized university where English is the primary language of instruction must normally complete either the:
a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 or higher, computer-based score of 237 or higher, or Internet-based score of 92-93 or higher; or
b. International English Language Testing System (IELTS) and achieve a score of 7 or higher.

### 31.2 General Program Requirements

1. The program of study for the Master of Science in Management Degree is the responsibility of the Supervisor.
2. It is the responsibility of the Supervisor to meet regularly (at least annually) with the student and to provide guidance at all stages of the student's program. An annual report prepared by the Supervisor and signed by the student and the Supervisor is required to be submitted to the Director of the Master of Science in Management Program (Faculty of Business Administration).
3. Course requirements are set by each of the program areas and are described under Program Areas below.
4. In addition to courses and research, graduate students are expected to participate in Faculty of Business Administration seminars.
5. The Master of Science in Management program requires the successful completion of a written thesis. See School of Graduate Studies General Regulations, Thesis and Reports regarding thesis examination.

### 31.3 Program Areas

Program areas are available in General Management, Human Resources Management/Organizational Behavior, Information Management, and Operations Management. The program requirements for each program area are outlined below:

### 31.3.1 General Management Program Requirements

Business 9901; Business 9923; Business 9927; one of Business 8103, Business 9903 or Business 9904; two electives chosen from any other graduate course(s) approved by the student's supervisor.

### 31.3.2 Human Resources Management/Organizational Behavior Program Requirements

Business 9901; Business 9920, Business 9921; Business 9924, Business 9925; one of Business 8103, Business 9903 or Business 9904.

### 31.3.3 Information Management Program Requirements

Business 9901; one of Business 8103, Business 9902, Business 9903 or Business 9904; two of Business 9911, Business 9913, Business 9915 or Business 9918; two other graduate courses approved by the student's supervisor.

### 31.3.4 Operations Management Program Requirements

Business 9901; Business 9910; one of Business 8103, Business 9902, Business 9903 or Business 9904; one of Business 9912, Business 9914, or Business 9917; and two other graduate course approved by the student's supervisor.

### 31.4 Courses

A selection of courses will be offered to meet the requirements of students as far as the resources of the Faculty of Business Administration will allow.
8103 Statistical Applications in Management
9901 Approaches to Management Research
9902 Modeling Methods in Management Research (prerequisite: 9901)
9903 Quantitative Methods in Management Research (prerequisite: 9901)
9904 Qualitative Methods in Management Research (prerequisite: 9901)
9910 Optimization
9911 Data and Process Models in Information Systems Development
9912 Probabilistic Models
9913 Human-Computer Interaction and Decision Support Systems
9914 Supply Chains: Models and Management
9915 Electronic Commerce
9917 Special Topics in Operations Management
9918 Special Topics in Information Systems
9920 Foundations in Organizational Behaviour
9921 Foundations in Human Resource Management
9923 Foundations in Organization Theory
9924 Current Issues in Organizational Behaviour
9925 Current Issues in Human Resource Management
9927 Current Issues in Organization Theory

## 32 Regulations Governing the Degree of Master of Science in Medicine

www.mun.ca/sgs/contacts/sgscontacts.php
www.med.mun.ca
The Faculty of Medicine offers the degree of Master of Science in Medicine in eight program areas: Applied Health Services Research, Cancer and Development, Cardiovascular and Renal Sciences, Clinical Epidemiology, Community Health, Human Genetics, Immunology and Infectious Diseases, and Neurosciences. The Faculty of Medicine also offers the degrees of Master of Health Ethics and Master of Public Health. Each program area has a Co-ordinator/Principal who is responsible for communicating the interests of the programs to the Faculty of Medicine Graduate Studies Committee and participates in the admission of graduate students into the program in Medicine.
The Degree of Master of Science in Medicine (in all of the programs excluding the Applied Health Services Research Program) is offered in the Faculty of Medicine to full-time and part-time students. The Applied Health Services Research program is offered by full-time study only. The graduate diploma programs in Community Health and Clinical Epidemiology are offered to full-time and part-time students.
The following regulations will apply in conjunction with the General Regulations of the School of Graduate Studies.

### 32.1 Master of Science in Medicine

### 32.1.1 Qualification for Admission

The admission requirements for each of the M.Sc. program areas in Medicine are described under Programs of Study.

### 32.1.2 General Program Requirements

1. The program of study for the M.Sc. in Medicine Degree is the responsibility of the Supervisory Committee composed of a Supervisor and at least two other faculty members.
2. It is the responsibility of the supervisory committee to meet regularly (at least annually) with the student and to provide guidance at all stages of the student's program. An annual report prepared by the Supervisor and signed by the student and all members of the committee is required to be submitted to the Assistant Dean of Research and Graduate Studies (Medicine).
3. Course requirements are set by each of the program areas and are described under Programs of Study.
4. In addition to courses and research, graduate students are expected to participate in Faculty of Medicine seminars and journal clubs.
5. The M.Sc. in Medicine requires the successful completion of a research project and a written thesis.

### 32.1.3 Program Areas

### 32.1.3.1 Applied Health Services Research

The Applied Health Services Research program is jointly offered by the University of New Brunswick (UNB), Memorial University of Newfoundland (MUN), and the University of Prince Edward Island (UPEI). Students will be educated in an interdisciplinary environment and will develop a substantive understanding of: the Canadian health system, the conduct of ethical research, critical appraisal, appropriateness of research design for particular policy questions and determinants of health models. They will also gain first-hand exposure in a decision-making/policy environment and learn how to conduct research through completion of a thesis. Access to specific computer software and the Internet is required and will be the responsibility of each student.

1. Administration
a. An Advisory Board, consisting of the Deans of Graduate Studies, the Principals from each site, plus student representation as well as health care decision makers and stakeholders from the Atlantic Region will oversee the academic program across the Universities and ensure program integrity.
b. A Program Management Committee, consisting of the Principals from UNB, Memorial University of Newfoundland, and UPEI will oversee the operation of the program.
c. At Memorial University of Newfoundland, the program shall be administered through the Office of Research and Graduate Studies (Faculty of Medicine) by a Principal who shall be appointed by the Dean of Graduate Studies on the recommendation of the Dean, Faculty of Medicine.
2. Qualifications for Admission
a. Admission is limited and competitive. To be considered for admission to the program, an applicant shall normally have a bachelor's degree with a minimum $75 \%$ average (or equivalent) from an institution recognized by the Senate. Normally, students should have completed an undergraduate course in statistics.
b. Students are normally admitted to the Fall semester (September). The deadline for receipt of applications is March 1. Late applications will only be considered if admissions decisions have not yet been made.

## 3. Program Requirements

a. All students will be required to successfully complete seven core courses, a four-month residency placement and a thesis. In addition, students must participate in five conference workshops.
b. Prior to submission of the thesis to the School of Graduate Studies for examination (see General Regulation Thesis and Reports), students shall present an open seminar.
c. Outline of program of study:

Outline of Program of Study

| Term | Required Courses |
| :---: | :---: |
| Semester 1 Fall | Workshop 1 <br> Theme: Orientation to first year <br> MED 6282 <br> MED 6284 <br> MED 6286 <br> Workshop 2 <br> Theme: Research Issues and Critical Appraisal |
| Semester 2 <br> Winter | MED 6288 <br> MED 6290 <br> Workshop 3 <br> Theme: Policy and Decision Making |
| Semester 3 <br> Spring | Residency Placement: All students are required to complete a 16 -week residency placement. The residency placement is negotiated by the Principal in consultation with the student and governed by the agreements outlined in the Atlantic Regional Training Centre residency manual. <br> Workshop 4 <br> Theme: Orientation to second year |
| Semester 4 <br> Fall | MED 6293 <br> MED 6294 or MED 6295 <br> Workshop 5 <br> Theme: Communication and Dissemination |
| Semester 5 \& 6 <br> Winter \& Spring | Thesis, including public presentation |

### 32.1.3.2 Cancer and Development

The graduate program in Cancer and Development offers study in fundamental cell and molecular biological areas including viral oncogenesis, growth factors, and oncogenes in developmental models, programmed cell death and drug resistance.

## 1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. All courses in the program have as a prerequisite, successful completion of an advanced, upper-level biochemistry, biology or medical course, with an emphasis on molecular biology or medicine.

## 2. Program Requirements

All students are required to attend, for credit, and participate in the Cancer and Development Journal Club (Cancer, Seminars, MED $6400,6401,6402,6403$ ). One other graduate course (chosen from MED 6580, 6590, 6591, 6340, 6341, or 6342) is required for M.Sc. Medicine students although other courses may be required in individual cases.

### 32.1.3.3 Cardiovascular and Renal Science

The graduate program in Cardiovascular and Renal Sciences enables students to pursue research and academic studies in selected topics including hypertension and stroke, neural and endothelial control of vasculature and blood pressure as well as physiological mechanisms promoting heart failure.

## 1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees.
2. Program Requirements

Students will be required to take a minimum of two graduate courses. Basic Cardiovascular and Renal Physiology (MED 6140) is required and must be taken within 1.5 years after entry into the program. Students will chose a second course from MED 6141, $6142,6143,6144$, or 6194 or any other graduate course approved by the student's supervisory committee.

### 32.1.3.4 Clinical Epidemiology

The program in Clinical Epidemiology is aimed at university graduates intending a career in health services, faculty members seeking advanced training in clinical epidemiology, medical doctors and other health care professionals interested in health research.

1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. In exceptional circumstances, a professional equivalent qualification will be considered for admission.

## 2. Program Requirements

a. Students are required to take: MED 6262, MED 6250, MED 6255, or MED 6260, plus a minimum of one elective. Electives are normally chosen from MED 6095, MED 6263 and MED 6265 as recommended by the supervisory committee and approved by the Director or Coordinator. In addition students are required to take the Seminar Series (MED 6400, 6401, 6402 and 6403). MED 6250 and MED 6262 are normally completed in the Fall semester. MED 6255 and MED 6260 are normally completed in the Winter semester.
b. Students are expected to give an oral presentation or course lecture in each year of their program.

### 32.1.3.5 Community Health

The graduate program in Community Health enables students to pursue research and academic studies in selected topics including community health, epidemiology, socio-behavioural health, biostatistics, health services utilization, health policy, and health promotion.

## 1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. In exceptional circumstances, a professional equivalent qualification will be considered. Students are expected to have successfully completed at least one basic university-level statistics course.

## 2. Program Requirements

Students are required to take three core courses: MED 6220, MED 6270, and MED 6280; 2 core stream courses: either the quantitative stream, consisting of MED 6200 and MED 6275 or the qualitative stream, consisting of MED 6294 and MED 6102; and 1 elective; and to attend, for credit, and participate in four semester-length seminar courses (MED 6400-6403).
Graduate students of the Division of Community Health and Humanities may be required to participate in education experiences which occur outside of the St. John's metropolitan area. Students may be responsible for their own associated transportation and accommodation.

### 32.1.3.6 Human Genetics

The graduate program in human genetics will enable students to pursue academic studies and research in a number of areas of genetics including molecular genetics, genomics, genetics of complex traits, genetic epidemiology, gene mapping, medical genetics, birth defects, and population genetics. Faculty members from all three divisions of the Faculty of Medicine (BioMedical Sciences, Community Health and Humanities, and the Clinical Disciplines) participate in the program.

1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. Applicants with backgrounds in the fields of genetics, biochemistry and biology are preferred.

## 2. Program Requirements

a. Students will be required to complete a minimum of two graduate courses. Within the Human Genetics program the following courses are offered: Human Molecular Genetics (MED 6393), Human Population Genetics (MED 6390), Applied Human Genetics (MED 6392), Cancer Genetics (MED 6394), Genetic Epidemiology (MED 6395) and Selected Topics in Human Genetics (MED 6391). In addition, there are a number of courses in other graduate programs which could be suitable for some students in this program, including Epidemiology I (MED 6270), Molecular Biology of Cancer (MED 6580), Molecular Biology I (MED 6590) and Molecular Biology II (MED 6591). Course selection for each student is determined by the supervisory committee in consultation with the student and is based on the area of study and past course credits.
b. Students must also participate in the Genetics Seminar Series (MED 6400, 6401, 6402, 6403) and are expected to participate in other Discipline of Genetics activities including an annual graduate student research forum.

### 32.1.3.7 Immunology and Infectious Diseases

The Immunology and Infectious Diseases group has an interdisciplinary character and consists of faculty from biomedical science. The graduate programs are designed to provide individualized training oriented towards basic research and a solid and scientific background in the discipline of immunology and infectious diseases.

1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. A Bachelor of Science Degree or equivalent is required.

## 2. Program Requirements

Students in the program are required to take a minimum of two courses. Students will choose from: MED 6114, MED 6119, MED 6127 , MED 6128, MED 6580 or any other graduate course approved by the student's supervisory committee. Some students may be required to take additional courses depending upon their thesis topic. All students are required to attend, for credit, and participate in the Immunology and Infectious Diseases Seminar Series (MED 6400-6403).

### 32.1.3.8 Neurosciences

The Neuroscience Program offers graduate studies in an interdisciplinary setting including faculty from biomedical science within the Faculty of Medicine. Graduate students may pursue research in a number of specialty areas including the physiological basis of learning and memory, stroke and neuroplasticity, neuroregeneration, signal transduction mechanisms, neuronal circuitry, neuroimmunology, and membrane physiology.

1. Qualifications for Admission

The admission requirements are as given under the General Regulations governing Master's degrees. It is expected that the students will have had courses in biochemistry, biology and/or psychology with some exposure to basic university-level statistics.
2. Program Requirements
a. Students in the program are required to take Systems Neuroscience (MED 6196) and one other graduate level course. Additional courses may be required based on the recommendation of the supervisory committee.
b. Students are expected to attend and participate in the activities of the neuroscience group including the weekly seminar and journal club.

### 32.2 Graduate Diploma in Medicine

The Faculty of Medicine offers a Graduate Diploma providing an opportunity for professionals and individuals within the health sector to obtain or upgrade their training in Clinical Epidemiology or Community Health.

### 32.2.1 Qualifications for Admission

To be admitted into the respective graduate diploma program a student must be eligible to register as a graduate student, as described under General Regulations, Graduate Diploma Programs. In special circumstances, and upon the recommendation of the Director of Clinical Epidemiology or Associate Dean of Community Health and Humanities, for their respective program, a suitable combination of training and professional experience relevant to that program may be acceptable for admission.

### 32.2.2 Program Requirements

1. Graduate Diploma in Medicine (Clinical Epidemiology)

A graduate diploma in Clinical Epidemiology requires successful completion of MED 6262, 6250, and 6255 and the completion of two of the Clinical Epidemiology seminar courses: MED 6400 and 6401. Students are expected to give an oral presentation in the seminar series.
2. Graduate Diploma in Medicine (Community Health)

A graduate diploma in Community Health requires successfull completion of MED 6220, MED 6270, 3 electives, and 2 semesterlength seminar courses (MED 6400-6401).

### 32.2.3 Graduate Courses

6030-6050 Special Topics
6070 Seminars in Physiological Instrumentation
6075 Human Physiology, Performance and Safety in Extreme Environments (HSPE)
6090-6101 Special Topics
6102 Critical Theory in Health and Society
6103-6119 Special Topics
6127 Immunology I
6128 Immunology II
613A/B Advanced Immunological Methods (same as the former 6130)
6131-6139 Special Topics
6140 Basic Cardiovascular and Renal Physiology
6141 Cardiovascular/Renal Techniques
6142 Selected Topics in Cardiovascular and Renal Physiology
6143 Cardiovascular Anatomy
6144 Current Concepts in Cardiovascular and Renal Pathophysiology
6150 Principles of Scholarly Writing for Rural Doctors (may be delivered outside the regular semester timeframe)
6151 Principles of Research for Rural Doctors (may be delivered outside the regular semester timeframe)
6180 Structure, Function and Pharmacology of Muscle
6190 General Pharmacology
6192 Pharmacology of Receptors and Receptor Effector Coupling Processes
6193 Advanced Topics in Neuroscience
6194 Advanced Topics in Physiology
6195 Neurobiology of Nervous System Diseases
6196 Systems Neuroscience
6197 Cellular Neuroscience
6198 Neuroanatomy for Graduate Students (accelerated format)
6199 Health Sciences: Writing and Grantsmanship
6200 Biostatistics I (credit may be obtained for only one of MED 6200 or MED 6262)
6220 Introduction to Community Health
6225 Health Inequities and the Social Determinants of Health
6250 Bassic Clinical Epidemiology
6255 Clinical Research Design
6260 Applied Data Analysis for Clinical Epidemiology
6262 Biostatistics in Clinical Medicine (credit may be obtained for only one of MED 6200 or MED 6262)
6263 Conducting and Publishing Systematic Review and Meta-analysis
6265 Genetics and Clinical Epidemiology
6268 Patient Engagement in Health Research
6270 Epidemiology I
6274 Chronic Disease Epidemiology
6275 Epidemiology II
6276 Current Topics in Canada's Health Care System

6277 Issues in Northern, Rural and Remote Health in Canada
6278 Advanced Biostatistics for Health Research
6279 Quantitative Methods for Applied Health Research
6280 Community Health Research Methods
6281 Theory and Approaches to Medical Publication
6282 Canadian Health Care System
6284 Research and Evaluation Design and Methods
6286 Ethical Foundations of Applied Health Research
6288 Policy and Decision Making
6290 Determinants of Health: Healthy Public Policy
6292 Qualitative and Quantitative Methods for Health Services Research
6293 Knowledge Transfer and Research Uptake
6294 Advanced Qualitative Methods
6295 Advanced Quantitative Methods
6296 Residency
6297 Theories of Social Justice in Health
6340 Research Topics in Cancer I
6341 Research Topics in Cancer II
6342 Basic Principles of the Pathology of Cancer
6390 Human Population Genetics
6391 Selected Topics in Human Genetics
6392 Applied Human Genetics
6393 Human Molecular Genetics
6394 Cancer Genetics
6395 Genetic Epidemiology
6400 Research Seminars for M.Sc. Students I (one-credit hour)
6401 Research Seminars for M.Sc. Students II (one-credit hour)
6402 Research Seminars for M.Sc. Students III (one-credit hour)
6403 Research Seminars for M.Sc. Students IV (one-credit hour)
6410 Research Seminars for Ph.D. Students I (one-credit hour)
6411 Research Seminars for Ph.D. Students II (one-credit hour)
6412 Research Seminars for Ph.D. Students III (one-credit hour)
6413 Research Seminars for Ph.D. Students IV (one-credit hour)
6420 Medical Science/Social Responsibility in Health Care: Aspects of Medical History (same as History 6125)
6580 Molecular Biology of Cancer (prerequisites: Biology 4241, Biochemistry 4100 [or equivalent])
6590 Molecular Biology I (cross-listed as Biology 6590 and credit-restricted with Biochemistry 6590) prerequisites: Biology 4241 (or equivalent)
6591 Molecular Biology II (cross-listed as Biology 6591 and credit-restricted with the former Biochemistry 6591) prerequisites: Biology 4241 (or equivalent)
6592 Practicing and Teaching Professionalism
6900 Medical Geography I Introduction to Geographic Information Science and Spatial Analysis in Health
6901 Medical Geography II - Geospatial Analysis and Modelling in Health prerequisite: 6900
6950 Simulation \& Technology-based Learning in the Health Professions
6951 Assessment and Evaluation in Health Professions Education (cross-listed as Rharmacy 6951)
6953 Current Perspectives and Advances in Medical Edưcation

## 33 Regulations Governing the Degree of Master of Science in Pharmacy

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/pharmacy
The Degree of Master of Science in Pharmacy (M.Sc. (Pharm.)) is offered to qualified full-time and part-time students by the School of Pharmacy. The General Regulations of the School of Graduate Studies of Memorial University of Newfoundland outlined in the current Calendar, and the Degree Regulations of the School of Pharmacy outlined below will apply to the M.Sc. (Pharm.) program. Every student in graduate studies shall comply with the General Regulations, the Degree Regulations, and all additional requirements of the School of Pharmacy.

### 33.1 Qualifications for Admission

Admission to the M.Sc. (Pharm.) program will be offered on the basis of academic excellence. The basic requirements for admission are those established by the School of Graduate Studies of Memorial University of Newfoundland. The minimum qualification for admission is a recognized four-year undergraduate degree in Pharmacy, or a recognized four-year undergraduate degree in physical, chemical or biological science, or equivalent, with an overall B average.
Applications submitted through the School of Graduate Studies will be evaluated by the Graduate Studies Committee of the School of Pharmacy. No student will be admitted to the program without a recommendation of acceptance by the Graduate Studies Committee. Admission of a student to the M.Sc. (Pharm.) program shall be made by the Dean of Graduate Studies.

### 33.2 Formulation of Program of Study

Upon acceptance to the program, the Supervisor will assess the student's research interests, background, strengths, and weaknesses. The Supervisor will formulate a program of study (see below) and select a supervisory committee for the student. The program of study will be selected on the basis of the thesis research, the background of the student, and the perceived need for specific graduate courses that will complement the student's working knowledge in the student's area of research. The supervisory committee will include the Supervisor, one other academic staff person from the School of Pharmacy, and one external academic staff person from Memorial University of Newfoundland. This committee will advise the student about the student's thesis research. Accordingly, they will meet with the student within two months of the student's initial registration, at the end of the second semester (8th month of study), at the end of the fourth semester (16th month), and immediately before the student begins to write the thesis. Both the program of study and the supervisory committee must be approved by the Graduate Studies Committee.

### 33.3 Program of Study

1. Minimum requirements for the M.Sc. (Pharm.) Degree will be the successful completion of:
a. Six credit hours in program graduate courses chosen from those available in Pharmacy, Medicine, or Biochemistry.
b. Pharmacy Seminar
c. A thesis embodying original research
2. Graduate courses will be chosen based on the academic background of the student and the area of the student's thesis research.

Note: Qualified students accepted into the program who are considered to have an insufficient background for their thesis research may be required to successfully complete additional courses as selected by their Supervisor.
3. Pharmacy Seminar: All students for the Degree of M.Sc. (Pharm.) will be required to participate in the Pharmacy Seminar during the first two years of their program. Selected topics in pharmaceutical sciences will be presented and discussed by faculty, students and visiting speakers. Graduate students will be required to present one seminar each year. In the second year of study, the graduate student will present a progress report of the student's research in the seminar. Upon successful completion of the seminar the Chair of the Graduate Studies Committee will so notify the Dean of Graduate Studies.

### 33.4 M.Sc. (Pharm.) Thesis

Every student shall submit a thesis to the School of Graduate Studies. The thesis shall contain original research conducted by the student and approved by the supervisory committee.
In preparation for the thesis examination, the student will provide a copy of the thesis to each member of the supervisory committee Each member of this committee will submit a written report to the Chairman of the Graduate Studies Committee.
Before the thesis is submitted, the student shall present an open seminar on the topic of investigation to the School of Pharmacy. Any serious deficiencies noticed at this stage should be carefully considered, in consultation with the supervisory committee, for revision.
Three copies of the thesis shall be submitted to the School of Graduate Studies through the School of Pharmacy, in a form and format as specified by the School of Graduate Studies.
As specified in General Regulation Theses and Reports of the School of Graduate Studies, the written thesis will be reviewed by examiners appointed by the Dean of Graduate Studies on the recommendation of the Dean of the School of Pharmacy or the Chairman of the Graduate Studies Committee.

### 33.5 Courses

Permission of the instructor and the Graduate Studies Committee of the School of Pharmacy is required for admission to any of the graduate Pharmacy courses.
6000 Medicinal Chemistry
6001 Advanced Physical Pharmacy
6002 Dosage Form Design and Novel Drug Delivery Systems
6003 Pharmacokinetic Modelling
6004 Principles of General Pharmacology
6005 Toxicology of Therapeutic Agents and Chemicals 6006 Health Economics
6100-6108 Special Topics in Pharmacy

## 34 Regulations Governing the Degree of Master of Social Work

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/socwrk
-
The degrees of Master of Social Work and Doctor of Philosophy are offered in social work.
The Master of Social Work (M.S.W.) may be completed by part-time or full-time study. All program components are offered online except on-campus institutes and field practicum.
The focus of the M.S.W. program is creative approaches to critical thinking for leadership in diverse social work practice. The program allows professionally qualified social workers holding the Degree of B.S.W. or an equivalent professional undergraduate degree in Social Work to undertake intensive advanced work in a specialized area of social work knowledge and practice.
The program is designed to be accessible to students in remote and rural areas, and requires that: (1) students have a computer and Internet access; and (2) can travel to St. John's for the institute portion of three practice courses. Students may incur charges for Internet services, long distance telephone charges, and travel and accommodation expenses.
Entrance into all courses and the offering of any course in an academic year is by approval of the School, consistent with the student's program. Students are admitted only into a designated program of studies.
The School of Social Work may deliver special offerings of the M.S.W. and/or other programs of the School to identified groups of out-ofprovince students where numbers warrant. These offerings will be self supporting, and therefore subject to an additional one-time nonrefundable tuition fee as approved by the Board of Regents and payable on first registration following formal admission to the program. Students will also pay appropriate tuition fees for each semester during their tenure in the program.
Admission to the special offerings of these programs will be competitive, using the same procedures and standards that are in place for students applying to the St. John's campus program(s).
Subject to approval by the M.S.W. Program Committee of the School of Social Work, students admitted to an out-of-province program offering may apply to transfer to the equivalent program on the St. John's campus. In such instances, the fee structure under which the student was admitted will not change. Subject to approval by the M.S.W. Program Committee of the School of Social Work, students admitted to a St. John's based program may apply to transfer to the equivalent out-of-province program. In these instances, students transferring from the St. John's based program offerings to an equivalent out-of-province offering will be required to pay a pro-rated onetime fee upon formal transfer to the special offering.

### 34.1 Qualifications for Admission

1. Admission to the M.S.W. program is limited, selective, and competitive. Meeting the minimum criteria for admission does not guarantee acceptance to the program.
2. To be considered for admission, an applicant shall hold a Bachelor of Social Work (B.S.W.) degree (or an equivalent professional
undergraduate degree in social work approved by the M.S.W. Program Committee of the School of Social Work) from an institution recognized by the Senate, with at least second class standing, and an average of at least $70 \%$ in the last 60 undergraduate credit hours.
3. In addition to the stated academic requirements, the applicant must have completed, subsequent to obtaining the B.S.W. degree, at least two years employment in professional social work practice or in a comparable human service discipline or activity. Extensive relevant experience prior to undergraduate degree work may be recognized in full or partial fulfillment of this requirement.
4. For ten percent of seats per year, priority is given to applicants of Aboriginal ancestry who meet the minimum criteria for admission. When the number of eligible applicants wishing to be considered under this clause exceeds the number of seats available, priority will normally be given to bona fide residents of Newfoundland and Labrador (see Qualifications for Admission). Applicants wishing to be considered under this clause shall complete the Educational Equity section of the Supplementary Information form at the time of application.
5. For an additional ten percent of seats per year, priority is given to applicants from other equity-seeking groups, based on sexual orientation, gender identity, race, ethnicity, disability and/or being disadvantaged by their economic position/background and who meet the minimum criteria for admission. When the number of eligible applicants wishing to be considered under this clause exceeds the number of seats available, priority will normally be given to bona fide residents of Newfoundland and Labrador (see Qualifications for Admission). Applicants wishing to be considered under this clause shall complete the Educational Equity section of the Supplementary Information form at the time of application.
6. Not withstanding the above, and in keeping with the School's commitment to achieving equitable representation in the student body, the M.S.W. Program Committee of the School of Social Work, at its discretion, may give preference to additional applicants of Aboriginal ancestry and/or members of other equity-seeking groups who meet the minimum criteria for admission.
7. Not withstanding the above, and in keeping with the University's special obligation to educate the citizens of Newfoundland and Labrador, when the number of eligible applicants exceeds the number of seats available, priority will normally be given to bona fide residents of Newfoundland and Labrador (see Qualifications for Admission).
8. Applicants will be deemed bona fide residents of Newfoundland and Labrador if at the time of application they are currently residing or have a permanent address in the province.

### 34.2 Procedure for Admission

1. Applicants must submit an application for admission with supporting documentation to the School of Graduate Studies, which approves recommendations for admission made by the M.S.W. Program Committee of the School of Social Work. The supporting documentation will consist of: an official transcript of the applicant's previous academic record submitted directly from the institution(s) attended; a statement of previous professional employment; a list of any published or unpublished works; a declaration of program emphasis and educational objectives; and two letters of appraisal, to be submitted by two referees, one assessing the applicant's previous academic performance and one assessing the applicants previous practice performance. Letters of appraisal are to be submitted directly to the School of Graduate Studies by the referees.
Note: Independent of admission to the program, a field practicum agency may require a Criminal Record Check, Vulnerable Sector Check, Child Protection Records Check, Health Check, etc.
2. The deadline date for receipt of applications for admission in September of each year is January 15 of the same year. All application forms and supporting documentation for admission to the program must be submitted to the School of Graduate Studies on or before the deadline of January 15.
3. The M.S.W. Program Committee of the School of Social Work may require the applicant to be interviewed by one or more faculty members of the M.S.W. Program Admissions Subcommittee.
4. A person who meets the basic admission requirements under Qualifications for Admission, may, space permitting, take SCWK 6012 without being admitted to the M.S.W. program. Persons wishing to take a course under this provision must have applied for admission to the M.S.W. program by January 15th of the same year, and been placed on the waitlist. If there are available seats in the course, the applicant will need to submit to the School of Social Work the appropriate form requesting permission to register in a graduate course, and apply or reapply for admission to Memorial University of Newfoundland as an undergraduate.
5. A person who has completed an M.S.W. degree is eligible to register in any M.S.W. course offering, space permitting.

### 34.3 Plan of Study

1. A student's plan of study will be developed cooperatively by the student and the M.S.W. Student Services Coordinator.
2. Specified supplementary studies may be required to ensure requisite knowledge pertinent to the requirements for the degree.
3. A student electing a thesis program shall be assigned a Supervisor by the Dean of the School in consultation with the student. It is recommended that a thesis Supervisor be assigned as early in the program as possible. The thesis supervisor, when assigned, shall normally assume the duties of faculty advisor and Pathway mentor.
4. a. Students who choose the thesis route must complete a thesis and a minimum of 21 credit hours consisting of SCWK 6012, $6013,6014,6313,6413,6917$, and at least one of SCWK 6314 or 6315 . Course route students must complete a minimum of 27 credit hours consisting of SCWK 6012, 6013, 6014, 6313, 6314, 6315, 6413, 6417, and 6917. Students in either route may be required to take additional courses.
b. In addition to the above, students will be required to register for SCWK 6000 during each of the relevant semesters as prescribed below, in accordance with their plan of study. This course comprises the academic mentorship component of the program and is designed to provide students with the opportunity to integrate curriculum with their individual academic and practice interests throughout their time in the program. For course route students, SCWK 6000 serves as a foundation for SCWK 6417. For thesis route students, SCWK 6000 serves as a foundation for their thesis.
5. Full-time course route and all thesis route students will register for SCWK 6000 beginning in the Fall of their first year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
ii. Part-time course route students completing the program in 6 semesters will register for SCWK 6000 beginning in the Fall of their first year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
iii. Part-time course route students completing the program in 9 semesters will register for SCWK 6000 beginning in the Fall of their second year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
iv. By the end of the final week of the first semester in which students are registered in SCWK 6000, they are required to submit the M.S.W. Pathway Learning Contract to their Mentor. Progress related to the contract is reviewed by the student and mentor prior to the student enrolling in SCWK 6417. The mentor must approve enrolment in SCWK 6417.
v. A grade of NC (No Grade Expected) will be awarded in all semesters of SCWK 6000 prior to the final Semester. The final grade in this non-credit course will be either Pas or Fal.

### 34.4 Field Practicum SCWK 6917

Each M.S.W. student is required to complete a 500 hour field practicum in a social work field setting, supervised by a qualified field instructor, approved by the School of Social Work. Field Instructors must have as a minimum qualification a M.S.W. Degree and a minimum of two years post-M.S.W. social work employment.
Scheduling of a field practicum is flexible. SCWK 6917 may be completed on a full time or part time basis, may occur in whole or in part within or outside the normal start and end dates of a semester, and in any case shall not exceed two semesters.
The M.S.W. Field Education Coordinator is responsible for facilitating appropriate matches among the student, field instructor, and field practicum setting. Although consideration will be given to all factors affecting the location and type of social work field practica, final approval of field practica rests with the School of Social Work. The School cannot guarantee the availability of M.S.W. field instruction in all communities and at all times. Students are responsible for their own financial support during the field practicum.
At least six months prior to the commencement of the semester in which they intend to begin SCWK 6917, all students shall submit a completed Intent to Register in M.S.W. Field Practicum form and a current resume to the M.S.W. Field Education Coordinator. The School of Social Work depends on the cooperation of community agencies external to the University to provide field practica and instruction to its students. A field agency may, prior to starting the practicum, require a Criminal Record Check, Vulnerable Sector Check, Child Protection Records Check, Health Check etc.. Students unable to meet the agency's requirements may be delayed in their program or prevented from completing their program of study. Students are required to complete and update these requirements in a timely fashion and at their own expense. The procedures of any given agency may change from time to time and are beyond the control of the University.
Evaluation of the field practicum will be on a PASS/FAIL basis. Students who voluntarily withdraw from the field practicum without prior approval of the M.S.W. Field Education Coordinator, or who conduct themselves in such a manner as to cause the agency and the M.S.W. Field Education Coordinator to terminate the practicum, will normally be awarded a grade of FAIL in the field practicum.

Students who voluntarily withdraw from the field practicum with the prior approval of the M.S.W. Field Education Coordinator cannot be guaranteed a second practicum during that semester. In this case, the student will be awarded a grade of INC for the field practicum. The student shall normally complete a field practicum in a subsequent semester.

### 34.5 Course Format

To increase accessibility for students in remote and rural areas, courses are offered in the following formats:

1. SCWK 6012, 6013, 6014, and 6413 are online courses.
2. SCWK 6313, 6314 and 6315 are online courses with a mandatory on-campus institute component consisting of 36 hours of classroom instruction. Course materials and activities for the pre-institute and post-institute components of the courses are available online for students. Classes are taught full time and students are expected to attend classes and complete assignments and group projects during this portion of the courses. It is recommended that students take leave from their employment for the duration of an on-campus institute, which may be scheduled in a combination of weekday, evening, and weekend hours within a two-week time period. The final decision regarding the on-campus institute schedule rests with the School of Social Work.
3. SCWK 6917 can be completed where appropriate supervision is available
4. SCWK 6000 and 6417 can be completed in consultation with the student's Pathway mentor.
5. In exceptional circumstances, and contingent upon student numbers and school resources, additional course sections may be offered in a regular classroom format.

### 34.6 Period of Study

For students admitted to the program under Plan of Study above:

1. For part-time students, the program is designed to permit completion of all degree requirements within three academic years (nine semesters) or two academic years (six semesters). The following is a sample program of study for nine semesters:

## Fall Semester:

SCWK 6012 in Year 1
SCWK 6000, 6013, 6313, 6315 or 6413 in Year 2
SCWK 6000, 6013, 6313, 6315 or 6413 in Year 3

## Winter Semester:

SCWK 6013, 6014, 6313, 6314, or 6413 in Year 1
SCWK 6000, 6013, 6014, 6313, 6314, or 6413 in Year 2
SCWK 6000, 6013, 6014, 6313, 6314, or 6413 in Year 3
Spring Semester:
SCWK 6014, 6314 or 6315 in Year 1
SCWK 6000, 6014, 6314 or 6315 in Year 2
SCWK 6917 (Field Practicum) may be completed in Fall/Winter/Spring of Year 3
SCWK 6417 (Pathway Scholarship) is the final requirement to be completed and may be completed in the same semester as SCWK 6917 (Field Practicum). Students are required to register for SCWK 6000 concurrently with SCWK 6917 and 6417.
2. For full-time students, course route, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:

## Fall Semester:

SCWK 6000, 6012, 6313 (Institute) and 6413. Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315

## Winter Semester:

SCWK 6000, 6013, 6014, and 6314 (institute)

## Spring Semester:

SCWK 6000, 6315 (Institute), 6417 (pathway scholarship), and 6917 (Field Practicum).
3. For full-time students, thesis route, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:

## Fall Semester:

SCWK 6000, 6012, 6313 (Institute) and 6413

## Winter Semester:

SCWK 6000, 6013, 6014, 6314 Institute). Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315
Spring Semester:
SCWK 6000, 6315, 6917 (Field Practicum), thesis. Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315

### 34.7 Evaluation

1. Failure to attain a final passing grade of $A$ or $B$ in a program course, or PAS in a PASS/FAIL course, shall lead to termination of the student's program, unless a re-read has been requested. Failure to obtain the required grades in the re-read shall lead to termination of the student's program.
2. To remain in good standing students are required to maintain professional behaviour consistent with the current Code of Ethics of the Canadian Association of Social Workers (www.casw-acts.ca/en/Code-of-Ethics). Students who are registered in their home province are required to comply with the current Code of Ethics of their provincial social work regulatory body. Students who are not registered in their home province are required to comply with the current Code of Ethics of the Canadian Association of Social Workers (www.casw-acts.ca/en/Code-of-Ethics). Students who fail to meet this requirement will be required to withdraw from the School upon the recommendation of the M.S.W. Program Committee.

### 34.8 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the School will allow.

### 34.8.1 Program Courses

6000 Pathway (mandatory repeatable non-credit course)
6012 Critical Thinking and Reflection
6013 Leadership for Social Justice (prerequisite/co-requisite 6012)
6014 Leadership in Social Policy and Programs (prerequisite/co-requisite 6012)
6313 Perspectives with Individuals and Families (prerequisite/co-requisite 6012)
6314 Perspectives with Diverse Communities (prerequisite 6012)
6315 Perspectives with Groups (prerequisite 6012)
6413 Research Theory, Design, and Analysis (prerequisite/co-requisite 6012)
6417 Pathway Scholarship (following completion of all other program components)
6917 Field Practicum (prerequisites 6012, 6013, 6014, 6313 and 6413 and prerequisite/co-requisite two of 6314 and 6315 for course route students; one of 6314 or 6315 for thesis route students)
Although the School does not currently offer a program in Social Policy and Administration, it has faculty expertise in these areas and, in the future, may offer the following courses:
6210 Seminar in Social Planning and Social Development
6220 Seminar in Organization Development
6230 Seminar in Community Development
6510 Seminar in Social Administration: Social Policy Analysis, Development and Administration
6520 Seminar in Social Administration: Program Design and Development
6530 Seminar in Social Administration: Evaluation of Policies and Programs
6540 Supervision in Professional and Clinical Practice
6550 Feminist Therapy in Social Work Practice
6820-29 Individual Reading and Research in Special Areas

### 34.8.2 Thesis

See General Regulations, Theses and Reports.
Note: Every student shall comply with the General Regulations governing the School of Graduate Studies and the M.S.W. Degree Regulations.

## 35 Regulations Governing the Degree of Master of Technology Management

www.mun.ca/sgs/contacts/sgscontacts.php
www.mi.mún.ca

### 35.1 Administration

The Program will be administered by an Academic Director appointed by the Vice-President (Marine Institute), together with an Academic Advisory Committee.
An Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). This committee will consist of the Academic Director as Chair, three members from the Marine Institute and one member from each of the Faculty of Business Administration and the Faculty of Engineering and Applied Science. Normally, all appointments will be for a period of three (3) years.
A Technical Advisory Committee consisting of a cross-section of members with professional expertise related to the technology sector, will provide regular feedback on program content, instruction, and future direction of the Program. Members of this Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). The Academic Director will be an ex officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

### 35.2 Program

The Master of Technology Management (MTM) is a comprehensive academic program that provides a broad understanding of the structure and operation of organizations and the factors that influence business decisions in the context of technology-based
organizations. It provides a technology management focus through the development of knowledge and understanding of the nature of technical operations and the factors that have an impact on their success, as well as the ability to apply these concepts within their organizations.
The program consists of two Options:

- Engineering and Applied Science Technology Option
- Aquaculture Technology Option

The program is offered online and requires successful completion of either 1) 24 credit hours of course work and a comprehensive project and report ( 6 credit hours), or 2) 30 credit hours of comprehensive course work. Students will typically register on a part-time basis.

### 35.2.1 Admission Requirements

Admission to the program is on a competitive basis.

1. The deadlines for submission of applications are as follows:

- Fall (September) semester: May 15
- Winter (January) semester: September 15

Applications received after listed deadlines will be considered as time and resources permit.
2. To be considered for admission to the Engineering and Applied Science Technology Option an applicant will normally possess a second class or better undergraduate degree from a university of recognized standing and will normally have:

- a Memorial University of Newfoundland Bachelor of Technology, Bachelor of Maritime Studies, or a comparable undergraduate degree with appropriate technology sector and business management course work; and
- a minimum of two (2) years relevant employment experience.

3. To be considered for admission to the Aquaculture Technology Option an applicant will normally possess a second class or better undergraduate degree from a university of recognized standing and will normally have:

- a post-graduate aquaculture credential or an aquaculture focus in their undergraduate degree; or significant professional experience in the aquaculture industry; and
- a minimum of two (2) years relevant employment experience.

4. In exceptional cases, applicants who have not completed an undergraduate degree, but who meet all other requirements, may be considered for admission. Preference will be given to those who have significant and relevant professional experience, and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
5. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:

- Test of English as a Foreign language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
- International English Language Testing System (IELTS) and achieve a score of 7 (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.
6. Upon acceptance into the program, students will be admitted to one of the two Options: the Engineering and Applied Science Technology Option or the Aquaculture Technology Option.

### 35.2.2 Program of Study

### 35.2.2.1 Master of Technology Management - Engineering and Applied Science Technology Option

1. Students in the Master of Technology Management (Engineering and Applied Science Technology Option) shall be required to complete a minimum of either:
a. 24 credit hours of course work and a major project and report ( 6 credit hours). Course work includes two compulsory core courses ( 6 credit hours) and six elective courses (18 credit hours). Students on the project route will complete MSTM 6100: Project in Engineering and Applied Science Technology Management (6 credit hours).
i. Core Courses (two to be completed):

MSTM 6031 Overview of Technical Operations
MSTM 6032 Managing Technological Innovation
ii. Elective courses (six to be completed):

MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6030 Principles of Management for Engineering Technology Enterprises
MSTM 6033 Quality Systems
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6035 Information Technology Applications in the Health and Engineering Technology Environments
MSTM 6036 Supply Chain Management and Advanced Engineering Technology Operations
MSTM 6037 Risk Analysis and Operations in the Engineering Technology Sector
MSTM 6038 Manufacturing and Engineering Technology Management
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6054 Technology Assessment
MSTM 6056 Management of International Development

## Project in Engineering and Applied Science Technology Management

MSTM 6100 Project in Engineering and Applied Science Technology Management ( 6 credit hours). Students will choose a topic in consultation with the Academic Director and will work independently to carry out an in-depth study of a problem or application within the area of technology management and fully document and present their findings. Preferably the problem will be directly related to a workplace situation.
b. 30 credit hours on a comprehensive-course route. Course work includes two compulsory core courses (6 credit hours) and eight elective courses ( 24 credit hours).
i. Core Courses (two to be completed):

MSTM 6031 Overview of Technical Operations
MSTM 6032 Managing Technological Innovation
ii. Elective Courses (eight to be completed):

MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6030 Principles of Management for Engineering Technology Enterprises
MSTM 6033 Quality Systems
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6035 Information Technology Applications in the Health and Engineering Technology Environments
MSTM 6036 Supply Chain Management and Advanced Engineering Technology Operations
MSTM 6037 Risk Analysis and Operations in the Engineering Technology Sector
MSTM 6038 Manufacturing and Engineering Technology Management
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6054 Technology Assessment
MSTM 6056 Management of International Development
2. Up to three relevant elective courses (9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.
3. Students with full-time status may register for a maximum of 9 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.
Students with part-time status may register for a maximum of 6 credit hours in any regular semester and a maximum of 3 credit hours in intersession or summer session.
Students may register for additional courses in a semester or session with the permission of the Academic Director of the Program.

### 35.2.2.2 Master of Technology Management - Aquaculture Technology Option

1. Students in the Master of Technology Management (Aquaculture Technology Option) shall be required to complete a minimum of either:
a. 24 credit hours of course work and a major project and report ( 6 credit hours). Course work includes two compulsory core courses ( 6 credit hours); and six elective courses (18 credit hours). Students on the project route will complete MSTM 6102: Project in Aquaculture Technology Management (6 credit hours).
i. Core Courses (two to be completed):

MSTM 6031 Overview of Technical Operations
MSTM 6032 Managing Technological Innovation
ii. Elective Courses (six to be completed including at least three from Category B):

Category A
MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6033 Quality Systems
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6037 Risk Analysis and Operations in the Engineering Technology Sector
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6056 Management of International Development
Category B
MSTM 6071 Management of Aquaculture Technology
MSTM 6072 Animal Husbandry Management
MSTM 6073 Aquaculture Environmental Management
MSTM 6074 Aquaculture Site and Operational Assessment
MSTM 6075 Aquaculture Engineering Technology Management
Project in Aquaculture Technology Management
MSTM 6102 Project in Aquaculture Technology Management ( 6 credit hours). Students will choose a topic in consultation with the Academic Director or designate and will work independently to carry out an in-depth study of a problem or application within the area of aquaculture technology management and fully document and present their findings. Preferably the problem will be directly related to a workplace situation.
b. 30 credit hours on a comprehensive-course route. Course work includes two compulsory core courses ( 6 credit hours); and eight elective courses ( 24 credit hours).

## Core Courses (two to be completed):

MSTM 6031 Overview of Technical Operations
MSTM 6032 Managing Technological Innovation
ii. Elective courses (eight to be completed including at least three from Category B):

Category A
MSTM 6022 Communication and Conflict Resolution in a Technical Environment
MSTM 6023 Strategic Planning, Policy, Participation and Management in Technical Operations
MSTM 6033 Quality Systems
MSTM 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments
MSTM 6037 Risk Analysis and Operations in the Engineering Technology Sector
MSTM 6039 Sustainability and Environmental Responsibility
MSTM 6052 Management of Intellectual Property
MSTM 6056 Management of International Development
Category B
MSTM 6071 Management of Aquaculture Technology

MSTM 6072 Animal Husbandry Management
MSTM 6073 Aquaculture Environmental Management
MSTM 6074 Aquaculture Site and Operational Assessment
MSTM 6075 Aquaculture Engineering Technology Management
2. Up to three relevant elective courses (9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.
3. Students with full-time status may register for a maximum of 9 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.
Students with part-time status may register for a maximum of 6 credit hours in any regular semester and a maximum of 3 credit hours in intersession or summer session.
Students may register for additional courses in a semester or session with the permission of the Academic Director of the Program.

### 35.2.3 Evaluation

1. Students for the Master of Technology Management Degree must obtain a grade of $B$ or better in all program courses.
2. Students who receive a grade of less than $B$ in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the students's program after which the student shall be required to withdraw from the program.

## 36 Regulations Governing the Degree of Doctor of Philosophy

In this and following regulations and notes, "Head" and "Department" shall be understood to mean "Dean or Director" and "Faculty or School" respectively, applying the regulations to a Faculty or School in which there are no Departmental divisions.
Students should consult the General Information and Regulations Governing All Graduate Students for information concerning the Degree of Doctor of Philosophy. For information concerning the number of courses required for specific programs, students should consult the following listing for the appropriate Department.
The degree of Doctor of Philosophy (Ph.D.) is offered in selected areas in Anthropology, Archaeology, Atomic and Molecular Physics, Biochemistry, Biology, Chemistry, Cognitive and Behavioural Ecology, Computer Science, Condensed Matter Physics, Earth Sciences (Geology), Earth Sciences (Geophysics), Education, Engineering, English, Environmental Science, Ethnomusicology, Experimental Psychology, Folklore, Food Science, Geography, History, Interdisciplinary, Linguistics, Management, Marine Biology, Mathematics, Medicine, Pharmacy, Philosophy, Physical Oceanography Social Work, Sociology, Statistics, and Theoretical Physics.

### 36.1 Anthropology

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss
www.mun.ca/anthro

### 36.1.1 Program of Study

1. The Ph.D. in Anthropology is offered in historic anthropology and ethnography of Newfoundland and Labrador, and Western Europe.
2. An applicant must normally hold a Master's Degree with a specialization in social and cultural anthropology. In exceptional circumstances, a student who has spent three semesters in the M.A. program may be recommended for transfer into the Ph.D. stream.
3. Residency: the Department requires a minimum residency of two years for Ph.D. students.
4. A supervisory committee will be established for each student as per General Regulations, Supervision, Ph.D. and Psy.D. Candidates.
5. A student will normally be required to complete four courses during their first three semesters in the program: Anthropology 6300 and 6412, and two other courses, to be determined by the supervisory committee. The supervisory committee may also require the students to complete additional graduate courses.
6. All students must demonstrate a reading knowledge of a second language to be determined in consultation with the supervisory committee. This language will normally be a language in which there is a substantial body of literature in Social and Cultural Anthropology. It could also be a field language pertinent to the student's project. The exam will be set and marked by an authority determined by the Head of the Department and the Dean of Graduate Studies as per General Regulations, Evaluation, Evaluation of Graduate Students, 4, and will normally be completed before the Comprehensive Examination is undertaken.
7. The Ph.D. Comprehensive Examination shall be administered in accordance with General Regulations, Comprehensive Examinations. The examination may be oral, written or both, and shall consist normally of three sessions, each of up to three hours duration, within a one week period, or three (3) one week take home examinations. A student will prepare for these examinations by undertaking supervised readings in three fields prescribed by the three members of the comprehensive exam committee. The examination will deal with specified areas of social/cultural anthropology. The examination will normally be scheduled in the third week of November each year in the second year of the student's program.
8. The student must submit a written thesis proposal for presentation to the Department two months following completion of the student's comprehensive examination.
9. As stated in the General Regulations for Graduate Studies, the time limit for completion of the Degree is 7 years.
10. Submission of dissertation and the oral defence of dissertation will follow General Regulations, Theses and Reports, Evaluation of Ph.D. and Psy.D. Theses.

### 36.1.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6010 Environmental Anthropology
6071 Health and Illness: Cultural Contexts and Constructions
6072 Marx and Social Inquiry
6081 Anthropology of Gender

6089 Anthropology of Underclass Life
6100 Social Organization
6110 Culture and Personality
6140 The Community
6210 Language and Culture
6240 Atlantic Regional Studies
6260 Anthropology of Development
6280 Newfoundland Ethnography
6281 Labrador Ethnography
6282 Ethnography of a Single Region
6300 Fieldwork and Interpretation of Culture
6400 Current Themes in Cultural Anthropology
6410 History of Anthropology
6412 Anthropological Theory
6413 Applied Anthropology
6430 Audiovisual Anthropology
6440 Master's Research Paper (9 credit hours)
6580 Selected Themes in Political Anthropology
6580-6599 Special Areas in Anthropology (excluding 6580, 6583)
6583 Economics and Societies
6600 Contemporary Debates in Anthropology
6890 Graduate Seminar

### 36.2 Archaeology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/archaeology

### 36.2.1 Program of Study

1. The Ph.D. in Archaeology is offered in prehistoric and historic archaeology of Northeastern North America and the Arctic.
2. An applicant must normally hold a Master's Degree with a specialization in Archaeology.
3. The Department requires a minimum residency of six semesters for Ph.D. students.
4. A supervisory committee will be established for each student as per General Regulations, Supervision, Ph.D. and Psy.D. Candidates, 2.
5. Students will normally be required to successfully complete two courses during their first three semesters in the program: Archaeology 6700 and 6411. The supervisory committee may require the students to complete additional graduate courses.
6. All students must demonstrate a reading knowledge of a second language to be determined in consultation with the supervisory committee. This language will normally be a language in which there is a substantial body of literature in Archaeology. The exam will be set and marked by an authority determined by the Head of the Department and the Dean of Graduate Studies (see General Regulations, Evaluation, Evaluation of Graduate Students, 4.) and will normally be completed before the Comprehensive Examination is undertaken.
7. The Ph.D. Comprehensive Examination shall be administered in accordance with General Regulations, Comprehensive Examinations. The examination may be oral, written or both, and shall consist normally of three sessions, each of up to three hours duration, within a one week period, or three (3) one week take home examinations. Students will prepare for these examinations by undertaking supervised readings in three fields prescribed by the three members of the comprehensive exam committee. The examination will deal with specified areas of archaeology. The examination will normally be scheduled in the third week of November each year in the second year of the student's program.
8. The student must submit a written thesis proposal for presentation to the Department two months following completion of the student's comprehensive examination.
9. As stated in the General Regulations for Graduate Studies, the time limit for completion of the Degree is 7 years.
10. Submission of dissertation and the oral defence of dissertation will follow General Regulations, Theses and Reports, Evaluation of Ph.D. and Psy.D. Theses.

### 36.2.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6020 Bioarchaeology
6040 Human Osteology
6095 Advanced Studies in Ethnohistory (same as History 6095)
6151 Palaeoethnobotany
6181 Palaeoeskimo Cultures of the Eastern Arctic
6182 Advances in Material Culture Analysis
6187 Readings in Maritime Provinces Prehistory
6189 Palaeopathology
6191 Approaches to Early Modern Material Culture
6192 Conservation Method and Theory
6290 Newfoundland and Labrador Prehistory
6310 Economic Analyses in Archaeology
6320 Ethnoarchaeology
6330 Archaeological Field Conservation
6409 History of Archaeology
6411 Theory and Method in the Study of Archaeology and Prehistory
6500 Special Topics in Historical Archaeology (prerequisite 6191)
6680-6699 (excluding 6687) Special Topics in Archaeology and Prehistory
6687 Applied Archaeological Sciences
6700 Interpretative Methods in Archaeology

### 36.3 Biochemistry

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/biochem
The Degree of Doctor of Philosophy is offered in Biochemistry or Food Science to full-time and part-time students.

### 36.3.1 Admission

The admission requirements for the graduate programs in Biochemistry and Food Science are as given under General Regulations.

### 36.3.2 Program of Study

1. The program of a student for the Ph.D. Degree shall be the responsibility of the supervisory committee, composed of the Supervisor and at least two other faculty members recommended with the concurrence of the Supervisor by the Head.
2. All students must enrol in Biochemistry 6999 (Seminars in Biochemistry and Food Science), and must complete Biochemistry 7000 (Graduate Skills) if they have not already done so. Depending on the background and/or area of specialization, a student's program may include additional courses taken for credit in Biochemistry, Food Science or related subjects.
3. It is the responsibility of the student to arrange regular meetings with the student's graduate supervisory committee. A semi-annual report, prepared by the Supervisor and signed by all members of the supervisory committee, is required to be given to the Head of the Department or delegate.
4. A student for the Ph.D. degree shall normally take the Comprehensive Examination within the first sêven semesters of the student's program. The examination will have two components: the preparation of a grant proposal on a topic related to the student's research specialization followed by an oral examination of the proposal. Failure of this examination will result in the termination of the student's program.

### 36.3.3 Courses

A series of advanced courses in the areas outlined below will be offered. Other than Biochemistry 6999 and Biochemistry 7000 , normally only one course will be offered per semester.
6000 Advanced Topics in Lipid and Lipoprotein Metabolism
6001-6009 Special Topics in Biochemistry
6010-6019 Special Topics in Nutrition and Metabolism
6020-6029 Special Topics in Food Science
6400 Control of Intermediary Metabolism
6460 Structural Biochemistry
6520 Nutritional Biochemistry
6530 Food Biochemistry
6590 Cellular, Molecular and Developmental Biology (credit restricted with Biology 6590 and Medicine 6590)
6630 Marine Biochemistry
6680 Processing and Quality of Foods
6999 Seminars in Biochemistry and Food Science 7000 Graduate Skills

### 36.4 Biology


www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/biology
The Degree of Doctor of Philosophy is offered in Biology to full-time and part-time students. Students interested in animal behaviour should also consult the section in the Calendar describing the Doctoral programs Cognitive and Behavioural Ecology. Students interested in Marine Biology should consult the section of the Calendar specific to the Doctoral program in that area of study.

### 36.4.1 Program of Study

1. A student will be required to take Biology 7000 (Graduate Core Seminar).
2. Admission to a Ph.D. program in Biology shall not normally take place until after the completion of the course requirements and the submission of the thesis for the M.Sc. Degree. However, on the recommendation of the Department, this requirement may be waived by the Dean of Graduate Studies.
3. The program of a student shall be the responsibility of a Supervisory Committee composed of the Supervisor and at least two other appropriate members recommended to the Dean by the Head (or delegate) of the Department with the concurrence of the Supervisor.
4. The Supervisory Committee shall interview the student normally within a month of first registration, to discuss the student's program and to explore any areas of weakness in the student's biological knowledge, especially where these relate to the intended areas of research. The Supervisory Committee will recommend a student's subdiscipline within Biology to the Department in writing after this meeting.
5. It is the function of a Supervisory Committee to have regular meetings, at least annually, with its graduate student. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Department. A copy will be sent to the graduate student and to the Dean of Graduate Studies.
6. The student will present a tentative outline of the proposed research to the Supervisory Committee, with a copy to the Department by the end of the second semester, and preferably prior to commencement of the research.
7. The student will present a research seminar to the Department, normally by the end of the second semester following admission, to describe the research topic being investigated and the methodologies to be employed. This seminar provides an opportunity for the student to receive constructive input from the broad biological community.
8. When the Supervisory Committee deems it necessary, a working knowledge of a language other than English may be required.
9. Comprehensive Examination
a. Timing of Examination
i. Timing of the comprehensive examination shall follow General Regulation, 1. under Comprehensive Examination, Ph.D Comprehensive Examination governing the Degree of Doctor of Philosophy. A student registered in a full-time Ph.D. program in the Faculty of Science, Department of Biology shall normally take the comprehensive examination during the first year of the program, and no later than one year after completion of the prescribed courses.
ii. The procedure shall be initiated by the student's Supervisor who will notify the Department of Biology, in writing, of the student's readiness. Failure to meet the above requirement can result in the student being required to withdraw from the program.
b. Examination Committee

The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Department of Biology according to Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination, 2. of the General Regulations of the School of Graduate Studies. No more than two members of the Examination Committee may be members of the student's Supervisory Committee. The committee shall meet and recommend to the Department in writing an examination seminar topic within the student's previously determined subdiscipline.
c. Examination Procedure

The Department shall provide the student the examination date and the seminar topic in writing not more than six nor less than four weeks prior to the examination. The student shall provide each member of the Examination Committee a written paper on the seminar topic one week prior to the examination. The Examination Committee shall evaluate the student's presentation and response to questions put to the student during the Oral Examination both on the seminar and within the student's subdiscipline of Biology.
d. Subsequent Action

The Examination Committee will meet in camera to arrive at its conclusions. The Chair shall report the results of the Examination to the Head and the Dean of Graduate Studies for transmission to the student. The report will include one of the following decisions: a) the student passed with distinction, passed or failed. b) if failed and it is the first examination whether the student may be re-examined.
e. Re-examination

Comprehensive Re-examination if permitted will occur not sooner than one month and not more than six months after the first. The student and the Supervisory Committee shall be informed of the deficiencies found. The format for the second examination will be determined by the Examination Committee with the approval of the Biology Graduate Studies Committee. The student will be informed of the topic and format four to six weeks prio to the examination. The examination will follow the procedure outlined in $8 . c$ and d. above. A failure will require the student to withdraw from the program.
10. Theses shall conform to Theses and Reports of the General Regulations of the School of Graduate Studies and the Departmental Guidelines.

### 36.4.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Research Topics in Microbiology
6131 Models in Biology (credit cannot be obtained if already received for Biology 4607)
6351 Behavioural Ecology and Sociobiology (cross-listed as Psychology 6351) credit cannot be obtained if already received for Biology 4701
6590 Molecular Biology I (cross-listed as Medicine 6590 and credit-restricted with Biochemistry 6590) prerequisites: Biology 4241 (or equivalent)
6591 Molecular Biology II (cross-listed as Medicine 6591 and credit-restricted with the former Biochemistry 6591) prerequisites: Biology 4241 (or equivalent)
6592 Bacterial Genetics (credit-restricted with the former Biochemistry 6592) prerequisite: Biology 4241 (or equivalent)
6593 Selected Readings in Molecular Biology (credit-restricted with the former Biochemistry 6593) prerequisites or co-requisites: one of Biology, Biochemistry or Medicine 6590, and one of Biology 6591, Medicine 6591, or the former Biochemistry 6591 (or equivalent)
6710 Marine Benthic Biology
7000 Graduate Core Seminar (cross-listed as Ocean Science 7000)
7101 Topics in Marine Biology
7201 Topics in Cellular and Molecular Biology and Physiology
7220 Quantitative Methods in Biology (credit cannot be obtained if already received for Biology 4605)
7300 Ornithology (credit cannot be obtained if already received for Biology 4620)
7301 Topics in Ecology and Conservation Biology
7530 The Molecular Biology of Development
7535 Research Methods in Marine Science
7920-7960 Special Topics in Biology (excluding Biology 7931)
7931 Research Methods in Genetic Biotechnology (Note: Biology 7931 may be delivered in an accelerated format outside of the regular semester time frame)

### 36.5 Chemistry

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/chem

### 36.5.1 Program of Study

The Degree of Doctor of Philosophy in Chemistry is offered as full-time or part-time study. A Master's Degree in Chemistry or related area from a recognized university is normally required for entry into the Ph.D. program. Students holding a Bachelor's Degree (Honours or equivalent) in Chemistry may be considered for direct admission into the Ph.D. program. Students currently registered in the Memorial University of Newfoundland's Chemistry M.Sc. program for a minimum of three semesters may request transfer into a Ph.D. program. The transfer should be supported by the Supervisor and the Supervisory Committee and subsequent to satisfactory presentation of a written progress report and Ph.D. research proposal.

1. Upon recommendation of their supervisor, students will write American Chemical Society (ACS) placement test(s) in the first two weeks of their initial semester of registration in order to determine an appropriate course program.
2. Students will be assigned a Supervisory Committee consisting of the Supervisor and at least two other appropriate faculty members appointed by the Dean on recommendation of the Chemistry Deputy Head (Graduate Studies).
3. The program of a student must be arranged by the Supervisor in consultation with the Supervisory Committee and the student before the second semester of registration. It is the responsibility of the Supervisory Committee to meet at least annually with the student, to provide guidance at all stages of the student's program, and, in consultation with the student, to prepare annual written progress reports for submission to the Dean of Graduate Studies.
4. Students holding a Master's Degree from a recognized university are normally required to successfully complete a minimum of 6 credit hours of graduate Chemistry courses with a minimum grade of $B$ and to present a seminar describing the student's research (Chemistry 6003). Courses taken towards a Master's Degree may not be repeated. students not holding a Master's Degree must * successfully complete at least 12 credit hours of graduate Chemistry courses with a minimum grade of B in addition to Chemistry 6003.
5. Students are required to attend Departmental seminars.
6. Students must pass a comprehensive examination, as described in the General Regulations, according to one of the following descriptions:
a. A three-hour written part covering topics in Organic Chemistry, and, subsequent to the written examination at the discretion of the comprehensive examination committee, an oral exam designed to explore areas of perceived deficiency.
b. A paper on a research topic selected by the student in consultation with the student's supervisor and the examination committee and subsequently, an oral examination designed to explore general areas of Analytical, Inorganic and/or Physical Chemistry and areas of chemistry related to the research topic.
7. Students must submit and successfully defend a thesis deemed acceptable by two internal and one external examiner as outlined in the General Regulations.

### 36.5.2 Courses

6002 Doctoral Seminar
6003 Doctoral Research Seminar
6110 Analytical Chemistry II
6150 Advanced Spectroscopic Techniques
6151 Analytical Separations and Organic Mass Spectrometry
6152 Electroanalytical Techniques
6153 Techniques in Sampling, Trace Analysis and Chemometrics
6154 Business Management and Good Laboratory Practice
6155 Computers in Instrumental Analysis and Basic Electronics (same as Med 6070)
6156 Analytical Method Development and Sampling
6160 Laboratory Projects in Sampling, Electroanalysis and Trace Analysis
6161 Laboratory Projects in Analytical Separations and Spectroseopic Techniques
6190-9 Selected Topics in Analytical Chemistry
6201 Bioinorganic Chemistry
6202 Main Group Chemistry
6204 Mechanisms in Catalysis
6205 Photochemistry of Transition Metal Complexes
6206 Green Chemistry
6210 Organometallic Chemistry
6290-9 Selected Topics in Inorganic Chemistry
6300 Quantum Chemistry 4
6301 Quantum Chemistry II
6302 Molecular Spectroscopy
6304 Computational Chemistry I
6310 Electronic Structure Theory
6323 Chemical Thermodynamics I
6324 Chemical Thermodynamics II
6340 Biophysical Chemistry
6350 Electrochemical Kinetics
6360 Solid State Chemistry
6370 Nanoscale Phenomena
6380 Adsorption on Surfaces
6381 Surface and Interface Science
6382-9 Selected Topics in Physical Chemistry
6390-8 Selected Topics in Physical Chemistry
6399 Chemical Kinetics and Dynamics
6401 Organic Spectroscopic Analysis I
6402 Organic Spectroscopic Ânalysis II
6421 Natural Products Chemistry
6460 Organic Synthesis
6470 Physical Organic Chemistry
6490-9 Selected Topics in Organic Chemistry
6590-9 Selected Topics in Theoretical and Computational Chemistry
6600 Applications of Inorganic and Organometallic Chemistry to Toxicology
6620 Environmental Chemistry

### 36.6 Cognitive and Behavioural Ecology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science

### 36.6.1 Program of Study

1. The Cognitive and Behavioural Ecology Graduate Program focuses on interdisciplinary animal behaviour research. Research integrates mechanistic, developmental, evolutionary, and ecological perspectives on behaviour through molecular, individual, and population levels of analysis. Supervisors include faculty from the Departments of Biology, Ocean Sciences, Psychology, the Faculty of Medicine and the Environmental Science Program at Grenfell Campus, as well as adjunct faculty from the Canadian Wildlife Service, Department of Fisheries and Oceans, the Newfoundland and Labrador Forestry and Wildlife Divisions and Parks Canada. The Departments of Biology and Psychology jointly offer the Master of Science and the Doctor of Philosophy degrees in Cognitive and Behavioural Ecology.
2. The Administrative Committee is responsible for the Program. Committee members are appointed by the Dean of Science, on the recommendation of the Chair of the Committee and of the Heads of Biology and Psychology. The Committee Chair is elected by the committee members and appointed by the Dean of Science. The Committee makes recommendations to the Dean of Graduate Studies concerning admissions and academic requirements. In consultation with supervisors, recommendations are made concerning course programs, financial support, thesis committees, comprehensive and thesis topics, examiners and students' annual progress. Upon program completion, the Committee certifies that all requirements for the appropriate degree have been met. The Department of the Supervisor ensures that adequate facilities are provided for each student. Students in Cognitive and Behavioural Ecology are considered for teaching assistantships in the Psychology or Biology Departments.

### 36.6.2 Regulations

1. There are no required courses for the doctoral program. However, the Doctoral Seminar (CABE 6992) and/or other courses tailored for individual students may be included in the student's program by the Dean of Graduate Studies on the recommendation of the Chair of the Committee.
2. The comprehensive examination shall normally be taken within the first 5 semesters of the program. An Examination Committee will be struck in accordance with General Regulations. At least one member of either the Department of Biology or of the Department of Psychology (other than the Supervisor) must be on the Examination Committee, along with one other representative from among the faculty members currently associated with Cognitive and Behavioural Ecology and an additional representative from either within or outside of Cognitive and Behavioural Ecology. The student's Supervisor will be on the Examination Committee with a maximum of one other member from the student's supervisory committee permitted to serve when appropriate. The Examination Committee is chaired by the Chair of the Cognitive and Behavioural Ecology Committee. The examination will include a comprehensive, integrative review and critical evaluation of novel ideas with regard to a topic in Animal Behaviour or Behavioural Ecology. The review topic is assigned by the Examination Committee, which also determines the submission date for the paper, and the date of the examination. Normally, the student will write the paper in 10 weeks, and the oral examination will occur within two to three weeks of the paper's submission. This paper will form the basis of a public seminar. The Examination Committee will question the student about the paper, the topic and its broader relationship with Cognitive and Behavioural Ecology.

### 36.6.3 Courses

Biology 7220 Quantitative Methods in Biology
Cognitive and Behavioural Ecology 6240 Special Topics
Cognitive and Behavioural Ecology 6350 Behavioural Ontogeny
Cognitive and Behavioural Ecology 6351 Behavioural Ecology and Sociobiology
Cognitive and Behavioural Ecology 6992 Doctoral Seminar
Cognitive and Behavioural Ecology 7000 Field and Lab Methods in Animal Behaviour and Behavioural Ecology
Psychology 6000 Advanced Statistics in Psychology
Table of Credit Restrictions - Doctor of Philosophy in Cognitive and Behavioural Ecology
(Credit may be obtained for only one course from each of the pairs of courses listed in this table.)

| Present Course | Former Course |
| :--- | :--- |
| CABE 6240 | Biopsychology 6240 |
| CABE 6350 | Biopsychology 6350 |
| CABE 6351 | Biopsychology 6351 |
| CABE 7000 |  |

### 36.7 Computer Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/computerscience
The degrees of Master of Science and Doctor of Philosophy are offered in Computer Science.

### 36.7.1 Program of Study

1. Admission into the Ph.D. program in Computer Science is normally restricted to students holding a Master's Degree (or equivalent) in Computer Science or a closely related area. Others may be considered for admission. See Qualifications for Admission of the General Regulations. International applicants are strongly encouraged to submit results of the (general) Graduate Record Examination (GRE) Test.
2. Each student for the Ph.D. shall complete a program of graduate courses prescribed by the supervisory committee. The normal minimum will be 9 credit hours.
3. The student shall take the Comprehensive Examination within the time limits specified in Comprehensive Examinations of the General Regulations. Students should consult the Departmental guidelines for a detailed description of the content of the Comprehensive Examination.
4. The Ph.D. Degree program will conclude with an oral defence of the thesis as described in Theses and Reports of the General Regulations.

### 36.7.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6758-6769 Special Topics in Computer Applications
6770-6790 Special Topics in Computer Science
690A/B Research Methods in Computer Science
6901 Applied Algorithms (credit may be obtained for only one of 6901 and 6783)
6902 Computational Complexity (credit may be obtained for only one of 6902 and 6743)
6903 Concurrent Computing
6904 Advanced Computer Architecture (credit may be obtained for only one of 6904 and 6722)
6905 Software Engineering (credit may only be obtained for one of 6905 or 6713)
6906 Numerical Methods (credit may only be obtained for one of 6906 or 6731)
6907 Data Mining Techniques and Methodologies (credit may be obtained for only one of 6907 and 6762)
6908 Database Technology and Applications (credit may be obtained for only one of 6908 and 6751)
6909 Fundamentals of Computer Graphics (credit may be obtained for only one of 6909 or 6752 )
6910 Services Computing, Semantic Web and Cloud Computing
6911 Bio-inspired Computing
6912 Autonomous Robotics (credit may be obtained for only one of 6912 and 6778)
6913 Bioinformatics
6914 3D Modelling and Rendering
6915 Machine Learning
6916 Security and Privacy
6918 Digital Image Processing (credit may be obtained for only one of 6918 or 6756)
6921 Syntax and Semantics of Programming Languages (credit may be obtained for only one of 6921 or 6711)
6922 Compiling Methods (credit may be obtained for only one of 6922 and 6712)
6924 Formal Grammars, Automata and Languages
6925 Advanced Operating Systems
6926 Performance Evaluation of Computer Systems (credit may be obtained for only one of 6726 and 6926)
6928 Knowledge-Based Systems (credit may be obtained for only one of 6928 or 6755)
6929 Advanced Computational Geometry (credit may be obtained for only one of 6929 or 6745)
6930 Theory of Databases (credit may be obtained for only one of 6930 or 6742)
6931 Matrix Computations and Applications (credit may only be obtained for one of 6931, the former 6732 and CMSC 6910) (crosslisted with CMSC 6910)
6932 Matrix Computations in Control (credit may only be obtained for one of 6932 or 6738)
6933 Nonlinear and Linear Optimization (cross-listed with Mathematics 6202)

### 36.8 Earth Sciences

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/earthsciences
The degrees of Master of Science and Doctor of Philosophy are offered in Earth Sciences (Geology) and Earth Sciences (Geophysics) by full-time and part-time study.

### 36.8.1 Program of Study

1. Admission into a Ph.D. program in Earth Sciences (Geology) and Earth Sciences (Geophysics) is normally restricted to students holding a Master's Degree or its equivalent. Students holding B.Sc. (Honours) degrees who show evidence of exceptional ability may be considered for a direct entry into a Ph.D. program. In exceptional circumstances, a student with a B.Sc. (Honours) Degree who has spent not less than 12 months in an M.Sc. Degree program may be recommended for transfer into a Ph.D. program, provided that the student can demonstrate, to the satisfaction of the Department of Earth Sciences, the student's ability to pursue research at the doctoral level.
2. A student in the Ph.D. Degree is normally required to complete 6 credit hours in addition to the credit hours required for the M.Sc. Degree. The courses must be selected from the overview and general courses below or with the approval of the supervisory committee and Head of Department, other graduate level courses including those offered by other departments. Depending on background and/or area of specialization, a student also may be required to complete additional courses in Earth Sciences or related subjects. All course requirements should be completed within 12 months from the date of the first registration in the Ph.D. program.
3. The Ph.D.Comprehensive Examination shall normally be taken within the first four semesters of registration in the Ph.D. program. A detailed description of the Ph.D. Comprehensive Examination can be found in the Department of Earth Sciences Graduate Student Handbook.
4. The Ph.D. Degree program will conclude with a thesis examination and an oral defense of thesis as prescribed in the General Regulations, Theses and Reports.
5. The Supervisor and the Head of the Department may recommend to the Dean of Graduate Studies that the program of a student who is not making satisfactory progress be terminated, in accordance with General Regulation, Termination of a Graduate Program.
6. A student is required to give an oral presentation to the Department on the results of the student's research. The presentation must be given during the second or third year of the program.

### 36.8.2 Courses

A selection of courses will be offered to meet the requirements of students as far as the resources of the Department will allow.

### 36.8.2.1 Overview Courses

7110 Physics of the Solid Earth
7120 Crustal Geophysics
7300 Changes in Global Paleoenvironment

7400 Tectonic Regimes
7410 Engineering and Environmental Geology
7500 Chemical Fluxes in the Earth
7810 Paleoecology (same as former 6810, credit may be obtained for only one of 7810 or 6810)

### 36.8.2.2 General Courses

6070 Quantitative Techniques in Mineralogy and Metamorphic Petrology
6105 Advanced Field Course in Applied Geophysics (may be offered in accelerated format)
6141 Rotation of the Earth
6142 Theory of Global Geodynamics
6152 Paleomagnetism
6171 Advanced Exploration Seismology
6172 Borehole Seismic
6175 Gravity and Magnetic Methods
6177 Mathematical Formulations of Seismic Wave Phenomena
6210 Genesis of Mineral Deposits
6320 Marine Geology
6400 Flow and Transport in Fractured Rock
6410 Advanced Engineering and Environmental Geology
6420 Deformation Mechanisms
6500 Stable Isotope Geochemistry
6510 Trace Element Geochemistry
6520 Methods in Advanced Research in Geochemistry
6540 Radiogenic Isotope Geochemistry
6550 Biogeochemistry
6600 Petroleum Geology
6740 Modern and Ancient Sedimentary Environments
6750 Sequence Stratigraphy
6801 Palaeobiology of Early Animal Life
6820 Palynology and Paleobotany
6900-6999 Special Topics in Earth Sciences

### 36.9 Education

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/educ
The degrees of Master of Education and Doctor of Philosophy are offered in Education.
The Degree of Doctor of Philosophy in Education is offered to qualified students, normally by full-time study. The General Regulations of the School of Graduate Studies of Memorial University of Newfoundland outlined in the current Calendar, and the Degree Regulations of the Faculty of Education outlined below will apply.

### 36.9.1 Admission to the Ph.D. Program

General qualifications for admission to the Ph.D. Programs at Memorial University of Newfoundland are set out in the University Calendar under School of Graduate Studies, General Regulation Qualifications for Admission, Ph.D. Program.
In addition, the following admission requirements apply:

1. an 'A' standing in a Master's Degree in Education or in an equivalent Master's Degree from an accredited university;
2. evidence of scholarly work, such as a master's thesis, directed research project, or qualifying research paper;
3. normally, completion of two years of professional experience in an educational setting;
4. an interview may be required.

### 36.9.2 Supervisory Committee

Each student will have a supervisory committee comprised of a minimum of three members, at least two of whom shall be members of the Faculty of Education. The thesis Supervisor shall be a faculty member in the Faculty of Education, Memorial University of Newfoundland.

### 36.9.3 Program of Study

1. Courses

Students are required to successfully complete four courses on the doctoral program.
a. Education $701 \mathrm{~A} / \mathrm{B} \diamond$ Doctoral Seminar in Education: Area of Specialization

Education 702A/B - Advanced Educational Research
Students register for the ' $A$ ' portion of the above-noted courses in the Fall semester of their program of study and the corresponding 'B' portion of the course in the following Winter semester. A grade of NC (No Grade Expected) will be assigned to the 'A' portion of each of these courses. Students must register for the 'A' portion of the above-noted courses in the first Fall semester of their program of study and the corresponding 'B' portion of the course in the following Winter semester. A grade of NC (No Grade Expected) will be assigned to the 'A' portion of each of these courses.
b. Students will also be required to complete two available graduate courses related to their program focus and specialty, based on the advice of the student's supervisory committee.
c. Normally, no more than four courses may be undertaken on a student's program.
d. Education 7003-30-Special Topics (offered as required)
2. Comprehensive Examination

The student shall undertake a written and an oral comprehensive examination, which will follow General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination which sets out the procedures for the comprehensive examination.
a. A student in a Ph.D. program in Education shall normally take the examination no later than the end of the seventh semester in the program. The student will have completed required courses prior to taking the Comprehensive Examination. In preparation for the Comprehensive Examination, the doctoral student, with the guidance of the student's Supervisor, will undertake study of the sub-disciplines/areas of concentration identified by the student and supervisory committee and approved by the Doctoral Committee. Normally, these will include the student's area of concentration and two additional sub-disciplines/areas of concentration.
b. Such study of sub-disciplines will normally include but not be limited to developing a reading list of important historical and current publications within the sub-disciplines, identifying emerging research emphases within the sub-disciplines, and writing scholarly review papers of these publications.
c. In preparation for the written comprehensive examination, the doctoral student and the supervisory committee will agree on the topics to be examined. The examination will be written over a three-week period.
d. Normally, the oral comprehensive examination will occur within six weeks of the written examination, which if judged to be successful by the Comprehensive Examination Committee, will form the basis of an oral comprehensive examination.
e. The procedure for scheduling the Comprehensive Examination shall be initiated by the student's Supervisor who will notify, in writing, the Dean of Education of the student's readiness. The date of both the written examination and the oral examination will be determined by the Dean of Education. The student will receive a written notice of the scheduled date for both examinations from the Dean of Education.
f. The Comprehensive Examination Committee shall be appointed by the Dean of Graduate Studies in accordance with School of Graduate Studies General Regulation Comprehensive Examination, Ph.D. Comprehensive Examination on the recommendation of the Dean, Faculty of Education. There will be six members of the Comprehensive Examination Committee as follows:
Dean of Education or delegate (Chair)
Chair of the Doctoral Committee of the Faculty Council of Education Student's Supervisor
Second member of student's supervisory committee
Dean of School of Graduate Studies or delegate (non-voting)
Member of the Faculty of Education or educational community selected by the Dean of Education.
In the event that the Chair of the Doctoral Committee is the student's Supervisor, the Dean of Education shall appoint an additional member.
3. Ph.D. Thesis Regulations
a. The student must submit a thesis proposal based on the student's own research interest to all members of the Supervisory Committee for critical evaluation. Normally, the proposal must be approved prior to the eighth semester of the program. The Chairperson of the Supervisory Committee will inform the student within one month of its acceptance, rejection or acceptance with recommended changes.
b. If the proposal is not acceptable, the student will normally be permitted a second attempt. The revised proposal must be submitted and deemed acceptable by the Supervisory Committee within a semester. Failure to resubmit within this time period will lead to termination of the student's program.
c. The thesis shall give evidence of the student's ability to carry out independent and original research, develop the necessary theoretical and methodological framework and analyses, and present the findings in a scholarly manner.
d. Each student will be required to present a seminar on the student's thesis research to the Faculty.
e. Ph.D. program will conclude with the examination and oral defence of the completed thesis in accordance with the appropriate sections of the General Regulation Theses and Reports, Evaluation of Ph.D. Theses governing the School of Graduate Studies.

### 36.9.4 Courses

$701 \mathrm{~A} / \mathrm{B}$ Doctoral Seminar in Education: Area of Specialization (credit may not be obtained for $701 \mathrm{~A} / \mathrm{B}$ and the former 7001)
702A/B Advanced Educational Research (credit may not be obtained for 702A/B and the former 7002)
7003-30 Special Topics

### 36.10 Engineering and Applied Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.engr.mun.ca
The degree of Doctor of Philosophy (Ph.D.) is offered in the Faculty of Engineering and Applied Science and may be obtained either through full-time or part-time studies. The Ph.D. degree can be obtained through programs in Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering, Oil and Gas Engineering, and Process Engineering.

### 36.10.1 Qualifications for Admission

Admission to the Ph.D. program is limited and competitive. All applicants must meet the minimum qualifications described in the General Regulations for the School of Graduate Studies. Admission is normally restricted to students holding a Master's Degree in Engineering or a related area. Decisions on admission, however, will also take into account such things as the applicant's rank in class, referees' assessments, general performance throughout the applicant's previous academic programs, and the availability of supervisors in the area of the applicant's interest. In cases of demonstrated ability, a student enrolled in the M.Eng. program may be allowed to transfer to the Ph.D. program without the completion of all the M.Eng. Degree requirements. As well, in exceptional cases, direct entry to the Ph.D. program, after completion of a Bachelor's Degree in Engineering or a related area, is possible.
Normally, applicants will be considered in January for admission for the following September. In special cases, applicants may also be considered in April and August. Applications should be made sufficiently far in advance to permit the University to obtain all relevant documents and review the application.

### 36.10.2 Program of Study and Research

A Ph.D. program shall normally consist of three components:

1. a minimum of 6 credit hours consisting of graduate courses recommended by the student's supervisory committee,
2. a comprehensive examination as detailed in Regulations for Ph.D Comprehensive Examination, and
3. a thesis satisfying the requirements of the General Regulations for the School of Graduate Studies.

In cases of direct entry after a Bachelor's Degree or promotion from a Master's program before fulfilment of the Master's course requirements, it is likely that the student will be required to take more credit hours than the normally required minimum. In such cases, the requirements for the course component of the student's program will be reviewed on an individual basis by the student's supervisory committee and the Dean of the Faculty of Engineering and Applied Science.

### 36.10.3 Regulations for Ph.D. Comprehensive Examination

## 1. Timing

A student registered in the Ph.D. Program shall normally take the Comprehensive Examination within four semesters of the start of the student's program. The student must have successfully completed all required courses prior to the Comprehensive Examination. The Comprehensive Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Dean of Engineering and Applied Science, normally within three semesters of the start of the student's program.
The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Dean of Engineering and Applied Science, normally within three semesters of the start of the student's program.

## 2. Examination Procedure

The Comprehensive Examination (as prescribed under General Regulations, Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination), shall be an oral examination that is open to the University community, however, only members of the Examination Committee are permitted to ask questions. Following the examination, the Examination Committee shall meet in camera to decide.

### 36.10.4 Ph.D. Thesis Regulations

1. Upon successful completion of the Comprehensive Examination, and normally prior to the end of the sixth semester in the program, the student must submit a thesis proposal to the Supervisory Committee for evaluation and approval. The proposal shall consist of 1) a written research proposal, normally of no more than 10,000 words, that should clearly define the research problem, survey literature, present the research method or experimental design, and may include a summary of results already obtained, and 2) a 20 to 30 minute presentation. The student should submit the written proposal at least one month prior to the presentation which is open to the University community.
2. The presentation will be chaired by the Dean of Engineering and Applied Science or delegate Immediately following the presentation, the Supervisory Committee shall question the student regarding the proposal and shall then meet in camera to assess the proposal. Assessment shall result in one of the following three outcomes: (1) accept, (2) accept-with changes, or (3) reject. The results of this assessment shall be provided to the student following the meeting. Assessments of 'accept with changes' or 'reject' shall be accompanied by written comments within one week of the proposal presentation.
3. If the proposal is rejected, the student shall be permitted to submit a second proposal. This proposal must be submitted and deemed acceptable by the Supervisory Committee within four months of the original proposal presentation. Failure to submit an acceptable second proposal within the time period shall lead to termination of the student's program.
4. The Ph.D. thesis shall constitute an independent and original research contribution
5. The Ph.D. thesis shall be evaluated according to the process established in General Regulations, Theses and Reports, Evaluation of Ph.D. and Psy.D. Theses governing the School of Graduate Studies.

### 36.10.5 Courses

For a list of graduate courses offered by the Faculty of Engineering and Applied Science refer to the list of "Core Courses" and the list of "Other Courses" offered for the Master of Engineering program.

### 36.11 English

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/english
The degrees of Master of Arts and Doctor of Philosophy are offered in English.
Students for the M.A. in English may complete the program as either part-time or full-time students. Students for the Ph.D. in English must be in attendance as full-time students for at least three semesters of the program.

### 36.11.1 Program of Study

1. Admission to the Ph.D. in English is limited and competitive. Applicants should have a Master's Degree in English or its equivalent from a recognized university and should have an outstanding academic record.
2. All students will be required to complete 15 credit hours in graduate courses. These courses will be selected by the student in consultation with the student's Supervisory Committee.
While students will normally be free to choose graduate courses of interest to them, it will be a primary responsibility of their Supervisory Committees to ensure that any serious deficiencies in their record of previous courses, graduate and undergraduate, are remedied, particularly in the area of proposed thesis research.
3. Students who have not previously taken English 7003 or its equivalent will take English 7003, which will count as one of the required courses for the Ph.D. Students who have taken English 7003 or its equivalent before entering the Ph.D. program must still complete 15 credit hours.
4. Students who have not completed English 4900 or English 5900 or an equivalent course will be required to complete English 5900 , which will not count as one of the required courses for the Ph.D. The course will be graded "pass" or "fail". As in other graduate courses a grade of 65B or above is considered a pass.
5. Students must submit a thesis proposal which includes a statement of topic, a working title, a plan of research, and a preliminary bibliography. The thesis proposal should be approved by the Supervisory Committee and submitted to the Departmental Graduate Studies Committee for its approval before the Comprehensive Examination and before the end of the fifth semester. The Departmental Graduate Studies Committee shall return the thesis proposal to the student no later than one month after receiving it.
6. Reading knowledge of a second language will be required of all students. Reading knowledge is defined as a minimum B grade in a second-year language course taken within the previous five years, a passing grade in an approved second-language course for graduate students, or performance satisfactory to the Department in an arranged reading proficiency test (in which a dictionary may
be used).
The language requirement should be completed before the Comprehensive Examination is taken.
The second language will normally be French. In exceptional circumstances, and on the recommendation of the Supervisory Committee and the Departmental Graduate Studies Committee, a language other than French may be substituted.
The Supervisory Committee may also require a demonstrated reading knowledge of an additional language (other than French or the substituted language) if such knowledge is deemed necessary for the student's research interests.
7. The Ph.D. Comprehensive Examination in English will have written and oral components, will have two parts, and will be prepared by the student's Comprehensive Examination Committee. The Comprehensive Examination Committee will determine the submission dates for papers and the dates of oral examinations. The Ph.D. Comprehensive Examination in English shall in all circumstances be in accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination.
The student's Comprehensive Examination Committee will include the Head (or the Head's delegate, usually the Graduate Coordinator), the Dean of the School of Graduate Studies (or delegate), the student's Supervisor, and three other members of the Department.
The examination shall take place before the end of the seventh semester.
The first part of the examination will be in a complementary area (Complementary Examination) and the student will have a choice of either writing an essay in response to questions determined by the Comprehensive Examination Committee or completing a set of assignments related to teaching in the field.
The second part of the examination will be in the student's thesis area (Thesis Area Examination) and will require the student to write in response to questions determined by the Comprehensive Examination Committee and that paper will form the basis of a departmental presentation. The Comprehensive Examination Committee will orally examine the student about the paper topic and the broader relationship to the thesis area.
All examinations, both written and oral, will comply with Departmental Guidelines.
Students will be graded "pass with distinction", "pass", "re-examination", or "fail." Students who are marked for "re-examination" will be re-examined in the area or areas in which the Comprehensive Examination Committee has determined that the student's performance is deficient. The nature of this re-examination (and whether it will be written or oral) is left to the discretion of the Comprehensive Examination Committee.

### 36.11.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
Notes: 1. Since it is impossible to list in detail the many topics that may from time to time be offered, the titles below refer only to the major periods and general subject areas in which specific courses may be available. The content and approach in specific courses will vary according to the research interests of students and faculty involved in the course. Students should consult the Department's annual Graduate Student Guide (or the Graduate Co-ordinator) for detailed descriptions of specific course offerings. Normally, no fewer than 30 credit hours in graduate courses are offered in any given academic year.
2. English 5900 cannot be counted as one of the required graduate courses in any program.
3. All students will normally take English 7003 - Trends in Contemporary Literary Theory, usually in their first semester.
4. Students who took graduate courses in English at Memorial University of Newfoundland before 1997 should consult with the Department before selecting further courses.
602F Foundation English for Graduate Students
6999 Master's Essay (for non-thesis students)
7003 Trends in Contemporary Critical Theory
7099 Masters Internship
7100-7149 Author Studies
7150-7199 Book Histories
7200-7249 Creative Writings
7250-7299 Critical Theories
7300-7349 Cultural Studies
7350-7399 Genre Studies
7400-7449 Global Literatures
7450-7499 Indigenous Voices
7500-7549 Literary Movements
7550-7599 National Literatures
7600-7649 Period Studies
7650-7699 Regional Literatures
7700-7749 Special Topics
7750-7799 Visual Narratives

### 36.12 Environmental Science

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science


## 36:12.1 General Information

1. The Environmental Science Program is an interdisciplinary graduate program involving the departments of the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Medicine and the Faculty of Engineering and Applied Science. There are three Environmental Science Graduate Degree streams: the Master of Science (M.Sc., Environmental Science), Master of Environmental Science (M.Env.Sci.), and the Doctor of Philosophy (Ph.D., Environmental Science). The program is available on a full or part-time basis.
2. The program is administered by a Board of Studies appointed by the Dean of Science. Supervisors of graduate students in the program include faculty from the Faculty of Science, the Faculty of Humanities and Social Sciences, the Faculty of Engineering and Applied Science, the Faculty of Medicine, and the Environmental Science Program at the Grenfell Campus, as well as adjunct appointees to the program (as a co-supervisor).

### 36.12.2 Program of Study

1. The Doctor of Philosophy (Ph.D., Environmental Science) is a research degree which includes a doctoral dissertation and course
work. Normally, students entering the Ph.D. program in Environmental Science will have a M.Sc. degree from an institution recognized by the Senate. Students in the Master of Science (Environmental Science) program, after a minimum of 12 months in their program of studies, may request a transfer to the Ph.D. program. Final decision for transfer from the M.Sc. program to the Ph.D. program rests with the Dean of the School of Graduate Studies. There are two courses ( 6 credit hours) required for the doctoral program. All students take Environmental Science 6010 and those with a disciplinary M.Sc. degree in Science from a recognized university also take Environmental Science 6000. Other courses tailored for individual students are included in the student's program by the Dean of Graduate Studies on the recommendation of the Chair of the Board of Studies.
2. The comprehensive examination should be taken on completion of all course work. An Examination Committee will be struck in accordance with the General Regulations. At least two members of the Board of Studies must be on the Examination Committee. The student's Supervisor will be on the Examination Committee and will be the only examiner from the student's Thesis Supervisory Committee. The Head of the Department of the Supervisor or delegate is invited to serve on the Comprehensive Examination Committee. The Examination Committee is chaired by the Chair of the Environmental Science Program. The examination will be both written and oral. The topic is assigned by the Examination Committee, which also determines the submission date for the paper, and the date of the examination. Normally, the student will write the paper within four months, and the oral examination will occur within six weeks of the paper's submission. This paper will form the basis of a public seminar. The Examination Committee will question the student about the paper, the topic and its broader relationship with Environmental Science.
3. The doctoral thesis is based on the results of systematic, independent research on an approved scientific topic. To ensure the research is interdisciplinary, the supervisory committee must be made up of members from at least two different departments. The student will be required to present a Ph.D. research proposal to the supervisory committee. The completed thesis will be evaluated according to the General Regulations of the School of Graduate Studies. It must contribute significantly to knowledge in the field of Environmental Science.

### 36.12.3 Courses

6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology
6004 Environmental Pollution and Mitigation (cross-listed as ENGI 9601)
6007 Environmental Risk Assessment (cross-listed as ENGI 9609)
6008 Air Pollution (cross-listed as ENGI 9624)
6010 Environmental Seminar
6201-6210 Selected Topics in Environmental Science

### 36.13 Ethnomusicology

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/hss www.mun.ca/folklore www.mun.ca/music
The Doctor of Philosophy program in Ethnomusicology is administered by the School of Music in consultation with the Department of Folklore, and generally in response to recommendations from an Interdisciplinary Advisory Committee with representation from both academic units, chaired by the Program Co-ordinator.
The Degree of Ph.D. in Ethnomusicology is offered by part-time and full-time study. This program is a research Degree, generally involving extended fieldwork. The resources of the Memorial University of Newfoundland Folklore and Language Archive are available to graduate students in Ethnomusicology.

### 36.13.1 Qualifications for Admission

Applicants may be admitted to the program if they have at least a B+ average in a M.A. Degree in Ethnomusicology, another field of Music, or other relevant discipline in the Humanities or Social Sciences with evidence of specialization in music. Applicants from a discipline other than Music will be expected to demonstrate the following skills:

- Competent performance in any musical tradition, as judged by a musician knowledgeable about that tradition.
- Knowledge of culturally appropriate language for discussion of performance techniques in that tradition.
- Ability to discuss músical details on the basis of aurral and/or written sources, as appropriate to that tradition.

Students for admission may, at the discretion of the Interdisciplinary Advisory Committee, be required to write diagnostic examinations measuring skills and knowledge in music literacy, theory, or aural perception. Students with deficiencies in any of these areas may be required to take remedial course work prior or in addition to the required program.
Upon completion of M.A. course work, students who have attained an A average may wish to be considered for transfer to the Ph.D. program. Students who seek this option must apply to the Interdisciplinary Advisory Committee to be considered for transfer one month prior to the completion of their M.A. courses or by the end of the 5th semester (see General Regulation Qualifications for Admission, Master's Program).

### 36.13.2 Program of Study

The Ph.D. program may be completed within twelve to fifteen consecutive semesters of full-time study, depending on fieldwork requirements. The Degree is normally taken by completing course work, comprehensive examinations, a language proficiency requirement, and a Ph.D. thesis, defended in accordance with General Regulation Theses and Reports of the School of Graduate Studies.

1. Students must complete a minimum of 21 credit hours of course work. If required courses have been completed at the M.A. level, electives may be substituted (with approval of the Interdisciplinary Advisory Committee). The required courses are:
a. Music 8001; Folklore 6030; and Folklore 7100.
b. Twelve credit hours of electives selected from courses listed below or from relevant courses offered in another discipline (with the approval of the Interdisciplinary Advisory Committee). Ph.D. students may take up to two courses ( 6 credit hours) in a cognate discipline.
c. Reading proficiency in one language other than English, relevant to the research area, demonstrated to the satisfaction of the Interdisciplinary Advisory Committee. The choice of language must be approved by the Interdisciplinary Advisory Committee. The language exam should normally be completed before the comprehensive exams.
d. Further courses beyond the minimum number may be required, depending on the background and needs of the student.
2. Comprehensive examinations will be administered in a major area, minor area, and theoretical/interdisciplinary area; a component of the comprehensive examination will test audio-visual skills. Bibliographies and discographies for several focussed topics will be developed by the student in consultation with the student's supervisory committee and will be the basis of examination questions. The written portion of the examination will be scheduled over a one-week period. The Comprehensive Examination Committee will normally schedule a consultation with the student to discuss the written essays within one month following the completion of the written examination. For further information see General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination.
3. Students must complete a thesis, examined and defended in accordance with General Regulation Theses and Reports of the School of Graduate Studies. A thesis proposal, including a working title, statement of purpose and research scope, outline of theoretical and methodological approach, working plan, and preliminary bibliography, together with proposed membership of the supervisory committee, must be submitted to the Interdisciplinary Advisory Committee no later than the fifth semester of study. The thesis shall demonstrate the student's ability to carry out original and independent research, develop the necessary theoretical and methodological framework, and present the findings in a scholarly manner.

### 36.13.3 Courses

## Theories and Methods:

Music 6807 Video Documentary Production (credit may be received for only one of Music 6807 and Music 7803)
Music 7001 Research Problems and Methods in Ethnomusicology
Music 7803 Radio Documentary Production (credit may be received for only one of Music 6807 and Music 7803)
Music 8001 Theoretical Issues in the Study of Music
Folklore 6010 Survey of Folklore Genres and Processes
Folklore 6020 Field and Research Methods
Folklore 6030 Folklore Theories
Folklore 6040 Feminist Theories: Perspectives and Issues
Folklore 6080 Vernacular Theories
Folklore 6090 Ethnology
Folklore 7100 Advanced Folkloristics II: Research and Ethnography
Form and Performance:
Music 7005 Performance Option
Folklore 6100 Song and Music
Folklore 6120 Ballad
Folklore 6130 Folk Music Canons and Documentary Sound Recordings
Folklore 6200 Folktale
Folklore 6210 Legend
Folklore 6220 Personal Experience Narrative
Folklore 6250 Language and Play
Folklore 6260 Ethnography of Communications
Folklore 6300 Ethnography of Belief
Folklore 6310 Health Systems
Folklore 6350 Custom
Folklore 6360 Traditional Drama
Folklore 6400 Material Culture
Folklore 6410 Vernacular Architecture
Folklore 6420 Art and the Artifact
Folklore 6430 Food and Culture
Folklore 6720 Folklore and Literature


## Area and Genre Studies:

Folklore 6120 Ballad
Folklore 6600 Folklore of Newfoundland
Folklore 6610 Folklore of Canada
Folklore 6620 Folklore of the United States
Folklore 6630 Folklore of the British Isles
Folklore 6770 The Global and the Local

## Social Identities:

Music 7006 Urban Ethnomusicology
Music 7007 Music in the Study of Gender, Race and Class
Music 7009 Music and Place
Music 7001 Research Problems and Methods in Ethnomusicology
Music 7802 Music and Intercultural Processes
Folklore 6510 Occupational Folklore
Folklore 6551 Indigenous Expressive Cultures in Cross-cultural Encounter
Folklore 6730 Folklore and Gender
Folklore 6780 Ethnicities
Independent Study:
Music 7026-29. Directed Reading in Ethnomusicology
Folklore 6570-79 Reading Course in Folklore

## Special Topics:

Music 6800-09 Special Topics in Music (excluding Music 6807)
Music 7800-09 Special Topics in Music (excluding Music 7802 and 7803)
Folklore 6511-29 Special Topics in Folklore
Folklore 6570-79 Reading Course in Folklore
Public and Applied Ethnomusicology and Folklore:
Music 6750 Music Industries Internship (2 credit hours)
Folklore 6740 Public Sector Folklore
Folklore 6760 Archiving
Folklore 6790 Museums: Perspectives and Practices

Folklore 6800 Applied Folklore
Interdisciplinary Perspectives:
Music 7008 Media Studies
Folklore 6700 Folklore and Culture
Folklore 6710 Oral Tradition and Oral History
Folklore 6750 Popular Culture: Theory and Debate

### 36.14 Fisheries Science

www.mun.ca/sgs/contacts/sgscontacts.php www.mi.mun.ca
The Degree of Doctor of Philosophy is offered in Fisheries Science to full-time and part-time students. The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.
An Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). The Committee will consist of an Academic Director as Chair, three members from the Marine Institute, and two members from other academic units of the University. Normally, all appointments will be for a period of three years.

### 36.14.1 Admission and Program of Study

1. Admission into the Ph.D. program in Fisheries Science is normally restricted to applicants holding a Master's Degree or its equivalent. In exceptional circumstances, an applicant with a B.Sc. Degree who has spent not less than 12 months in an M.Sc. Degree program may be recommended for transfer into a Ph.D. program. For this transfer to be accepted, the applicant must demonstrate, to the satisfaction of the Supervisor and Supervisory Committee, the ability to pursue research at the doctoral level.
2. In addition to completing a thesis of original research, a student will normally be required to take FISH 6000 and 6001. A student will normally be required by the Supervisor and Supervisory Committee to take two of FISH 6002, 6003, 6004, and/or 6005.
3. Within three months of the first registration in the Ph.D. degree program, the student will meet with the Supervisory Committee. It is the function of a Supervisory Committee to have regular meetings, at least annually, with its graduate student. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the graduate student and to the Dean of Graduate Studies.
4. At the first committee meeting, the Supervisory Committee shall discuss the student's program and will explore areas of weakness in the student's knowledge, especially where these relate to the intended areas of research. The Supervisory Committee may require the student to take additional courses.
5. The student and the Supervisory Committee will agree on a written thesis proposal outlining the objectives, methods, timetable and funding for the project, and provide the proposal (signed by the student and the Supervisory Committee) to the Head for inclusion in the student's file. This proposal should be no more than five pages in length.
6. The student will present a research seminar to the Academic Unit, normally by the end of the fourth semester following admission, to describe the research topic being investigated and the methodologies to be employed. This seminar provides an opportunity for the student to receive constructive input from the broad research community.
7. A student must successfully complete a Comprehensive Examination, as outlined under General Regulations, Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination. The comprehensive examination will be both written and oral.
8. A theses shall conform to General Regulations, Theses and Reports of the School of Graduate Studies.

### 36.14.2 Courses

FISH 6000 Science Communication for Fisheries
FISH 6001 Ecology, Maniagement, and Practice of North Atlantic Fisheries
FISH 6002 Data Collection, Management, and Display
FISH 6003 Statistics and Study Design for Fisheries Science
FISH 6004 Overview of Statistical Stock Assessment
FISH 6005 Advanced Statistical Stock Assessment

### 36.15 Folklore

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/folklore
The Degree of Doctor of Philosophy in Folklore is offered by part-time and full-time study and is primarily a research Degree. The program normally requires extensive fieldwork research in Newfoundland and/or the Maritimes.
Integral to the teaching of the Department of Folklore is the work of the Memorial University of Newfoundland Folklore and Language Archive; see section under Master of Arts, Folklore.

### 36.15.1 Program of Study

1. An applicant for admission to the Ph.D. program in Folklore must hold an M.A. Degree in Folklore, or its equivalent as determined by the Head of the Department and the Dean, with an average grade in M.A. courses of not less than $80 \%$.
2. All Ph.D. students in the Folklore program must complete at least 18 credit hours in program graduate courses which shall include Folklore 7000 and 7100 . Students will normally be free to choose graduate courses of interest to them in Folklore or related disciplines, though it will be a primary responsibility of their committees to ensure that any serious deficiencies are made good. At the end of the second semester the program and further status of the student will be reviewed.
3. Second Language Requirements:
a. All Ph.D. students are required to demonstrate an adequate reading knowledge of a second language - normally a common, modern language.
b. Reading knowledge is defined as a minimum B grade in a second-year language course taken within the previous five years, or performance satisfactory to the Department in an arranged reading proficiency test.
c. The selection of a second language can be based on the student's research requirements.
d. The selection of a second language must be made in consultation with the student's faculty advisor or Supervisor. Confirmation
that the choice is acceptable must be obtained from the Department.
e. The language requirement must normally be fulfilled before a student takes the Ph.D. Comprehensive Examination.
4. Comprehensive Examination for the Ph.D.:
a. The Ph.D. Comprehensive Examination shall be administered in accordance with General Regulations, Comprehensive Examinations. Students will prepare for three examinations by undertaking supervised readings in three fields decided by the Comprehensive Examinations Committee. The basic principle is to integrate knowledge within specific areas of folklore and folklife scholarship. The examination normally will be written with the format to be determined by the Comprehensive Examination Committee in consultation with the student. Assessment will be based on the examination of three papers each of one week duration or three open book examinations each of eight hour duration. The Committee will recommend to the Dean of Graduate Studies a grade of PWD (pass with distinction), PAS (pass), REX (re-examination), or FAL (fail).
b. Examination normally will take place only upon the completion of the second language requirements and no earlier than the end * of the first year after admission to candidacy but no later than one year after the completion of the program courses. The examination normally will be scheduled in the second semester following the student's completion of courses.
5. Ph.D. Thesis:
a. The student will normally submit a thesis proposal based on the student's own interests no later than the end of the semester following the completion of comprehensive examinations. The thesis proposal will include a working title, names of preferred Supervisor and two other Committee members, statement of topic, plan of research, statement of methodological and theoretical approach, a brief review of the literature and a preliminary bibliography. The proposal will be circulated to the Department for critical evaluation on the basis of which the student will be informed, within one month, by the Supervisor, of its acceptance, rejection, or acceptance with recommended changes.
b. The thesis shall give evidence of the student's ability to carry out independent and original research, develop the necessary theoretical and methodological framework and present the findings in a scholarly manner.

### 36.15.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, normally after consultation with the Head of the Department or the Graduate Studies Administrator, and as far as the resources of the Department will allow. Courses are structured according to the categories of: Theories and Methods, Issues, Form and Performance, Special Topics, Regional, National and International Heritage, Social Identities, Public and Applied Folklore, Interdisciplinary Perspectives and Required (Ph.D.).

## Theories and Methods

6010 Survey of Folklore Genres and Processes
6020 Field and Research Methods
6030 Folklore Theories
6040 Feminist Theories: Perspectives and Issues
6080 Vernacular Theories
6090 Ethnology

## Issues

6050 Issues in Folkloristics
6060 Issues in Folk Literature
6070 Issues in Folklife
Form and Performance
6100 Song and Music
6120 Ballad
6130 Folk Music Canons and Documentary Sound Recordings
6200 Folktale
6210 Legend
6220 Personal Experience Narrative
6250 Language and Play
6260 Ethnography of Communications
6300 Ethnography of Belief
6310 Health Systems
6350 Custom
6360 Traditional Drama
6370 Ritual, Festival and Public Display
6400 Material Culture
6410 Vernacular Architecture
6420 Art and the Artifact
6430 Food and Culture
6720 Folklore and Literature

## Special Topics

6511-29 Special Topics in Folklore
6550 Special Research in Folklore
6551 Indigenous Expressive Cultures in Cross-Cultural Encounter
6552-69 Special Research in Folklore
6570-79 Reading Course in Folklore
Regional, National and International Heritage
6600 Fôlklore of Newfoundland
6610 Folklore of Canada
6620 Folklore of the United States
6630 Folklore of the British Isles
6640 Traditional Culture of Scotland
6650 Culture and Traditions of Ireland
6660 Folklore of the Francophone Regions
6690 International Folklore

## Social Identities

6510 Occupational Folklife
6730 Folklore and Gender

6770 The Global and the Local
6780 Ethnicities

## Public and Applied Folklore

6380 Perspectives on Cultural Tourism
6740 Public Sector Folklore
6760 Archiving
6790 Museums: Perspectives and Practices
6800 Applied Folklore

## Interdisciplinary Perspectives

6700 Folklore and Culture
6710 Oral Tradition and Oral History
6750 Popular Culture: Theory and Debate
Required (Ph.D.)
7000 Advanced Folkloristics I
7100 Advanced Folkloristics II Research and Ethnography
Credit may not be obtained for both 6010 and the former 6110; 6020 and the former 6111; 6030 and the former $6112 ; 6100$ and the former 6430; 6120 and the former 6445; 6300 and the former 6230; 6350 and the former $6230 ; 6400$ and the former $6501 ; 6720$ and the former 6460.

### 36.16 Food Science

See Biochemistry.

### 36.17 Geography

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/science
www.mun.ca/geog

### 36.17.1 Program of Study

1. To be admitted to the program, an applicant must have completed either a Master of Arts or a Master of Science Degree, or its equivalent, in Geography or a related discipline. In exceptional circumstances, a student who has completed either a B.A. (Honours) or B.Sc. (Honours) Degree, and who has spent not less than 12 months in a M.A. or M.Sc. Degree program may apply for transfer into a Ph.D. program. A successful application for transfer will require that the student demonstrate to the satisfaction of the Department an ability to pursue research at the doctoral level.
2. The deadline for submission of applications for admission is January 15 . Students will normally commence their programs in the Fall semester.
3. Research areas for graduate study at the Doctoral level are cultural, political and historical geography, economic geography, resource management, community and regional development, physical geography, and geographic information sciences.
4. An applicant will be admitted to a doctoral program only if a faculty member agrees to act as Supervisor, and at least two other individuals are willing to serve on the supervisory committee.
5. All students must successfully complete Geography 6000 and 6001 if these courses, or equivalent courses, have not been included in their Master's program. In addition, all students are required to successfully complete a minimum of 3 credit hours in graduate program courses.
6. The supervisory committee may decide that a student successfully completes an examination for reading or speaking a language other than English.
7. After the successful completion of all required courses, students must take a comprehensive examination which will have both a written and an oral component.
8. Following successful completion of the comprehensive examination the student will submit a written research proposal to the supervisory committee. The proposal must then be approved by the Committee prior to the commencement of research by the student.
9. Each student will be required to present a seminar on their research to the Department.
10. The Ph.D. program will conclude with the examination and oral defence of the completed thesis in accordance with the appropriate sections of the General Regulations governing the School of Graduate Studies.

### 36.17.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.
6000 Development of Geographical Thought and Practice I
6001 Development of Geographical Thought and Practice II
6002 Directed Reâdings in Geography
6100 Research Techniques in A Selected Field of Geography I
6101 Research Techniques in A Selected Field of Geography II
6120 Geospatial Modelling and Analysis
6150 Environmental Remote Sensing and Image Analysis
6200 Economic Geography I
6201 Economic Geography II
6204 Sustainable Community and Regional Development
6250 Conservation and Sustainability of Natural Resources
6251 Survey Design, Questionnaire Development and Techniques of Data Collection
6300 Problems in Fisheries Geography
6400 Fluvial Geomorphology
6401 Glacial Geomorphology
6402 Coastal Geomorphology

6410 Climatology
6420 Quaternary Geography
6430 Biogeography
6500 Cultural Geography
6600 Historical Geography
6700 Political Geography
6800 Urban Geography
6821 Advanced Computer Mapping
6900 Graduate Seminar in Regional Geography
6990-95 Special Topics in Geography

### 36.18 Geology

See Earth Sciences.

### 36.19 Geophysics

See Earth Sciences.

### 36.20 History

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/history
The degrees of Doctor of Philosophy and Master of Arts are offered in History by full-time or part-time study.

### 36.20.1 Program of Study

1. The Ph.D. Degree in History is offered in accordance with General Regulations and current department strengths
2. An applicant must hold either a Master's Degree in History or a Bachelor's Degree in History with first-class Honours or their equivalents as determined by the Head of the Department and the Dean.
3. During the first semester, a Ph.D. student must successfully complete History 7000 and 7001 if these courses (or their equivalents) have not been included in the student's Master's program. The Supervisory Committee may require the student to complete additional graduate courses.
4. A student must demonstrate in accordance with regulations established by the School of Graduate Studies a reading knowledge of French before taking the comprehensive examination. On the recommendation of the Supervisory Committee a modern language other than French may be substituted. In addition, the Supervisory Committee may require a demonstrated reading knowledge of a second language other than French or English (or the substitute language).
5. A student will undertake supervised reading in fields prescribed by the Department. The Supervisors of these programs of reading, along with the thesis Supervisor, will comprise the student's Supervisory Committee.
6. In the second year of the program, after the successful completion of all required courses, a student must take a Comprehensive Examination, which will have both written and oral components.
7. Following successful completion of the Comprehensive Examination, a student must submit a thesis proposal, deemed acceptable by the Supervisory Committee, to the Department
8. An interested applicant is urged to consult with the Head of the Department on these prerequisites and other requirements before filing an application for admission.

### 36.20.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the Department will allow.
6000 Advanced Studies in Newfoundland History
6010 Advanced Studies in Canâdian History
6020 Advanced Studies in the History of the United States
6030 Advanced Studies in French History
6040 Advanced Studies in British History
6050 Advanced Studies in German History
6060 Advanced Studies in North Atlantic History
6070 Advanced Studies in Social History
6075 Advanced Studies in Labour and Working Class History
6080 Advanced Studies in Intellectual History
6090 Advanced Studies in Women's History
6095 Advanced Studies in Ethnohistory
6100 Advanced Studies in Milifary History
6105 Advanced Studies in Diplomatic History
6110 Advanced Studies in Maritime History
6120 Advanced Studies in Economic and Business History
6125 Medical Science and Social Responsibility in Health Care: Aspects of Medical History (Cross-listed as Medicine 6420)
6130 Quantification and Measurement in History
6140-59 Research in Special Topics
6160-79 Reading Courses (Special Topics)
6190 Theory and Method
6200 Masters Seminar I
6999 Masters Research Paper (12 credit hours)
7000 Ph.D. Seminar I
7001 Ph.D. Seminar II

### 36.21 Interdisciplinary

## www.mun.ca/sgs/contacts/sgscontacts.php

 www.mun.ca/sgsThe Degree of Doctor of Philosophy (Interdisciplinary) is offered by part-time and full-time study.
The General Regulations of the School of Graduate Studies and the regulations outlined below will apply.

### 36.21.1 Administration

1. The program shall be administered by a Director, together with the School of Graduate Studies Interdisciplinary Ph.D. Committee (ID Ph.D. Committee). Duties of this committee include recommendation of applications for acceptance into the program.
2. The program of study of each student will be guided for the duration of the program by a Supervisory Committee of either three ( 3 ) or five (5) faculty members, appointed by the Dean of Graduate Studies on the recommendation of the ID Ph.D. Committee at the time of admission.
In addition, the Director shall be an ex officio member of each Interdisciplinary Ph.D. Supervisory Committee.
Duties of this Committee shall involve supervising the overall program of study, including the recommendation of appropriate courses, the setting and scheduling of comprehensive examinations, advising on the development of a research proposal and thesis-writing and recommendation of thesis examiners.
The Supervisory Committee is also responsible for recommending fellowship support to the ID Ph.D. Committee and to the Dean of Graduate Studies at the time of admission and throughout the student's program.
3. Normally, the "academic home" for the student is in the Department or faculty/school of the Chair of the Supervisory Committee.

### 36.21.2 Admission

1. Prospective students should normally hold a Master's Degree and have an excellent academic record. Applications for admission must include:
a. two letters of reference;
b. a detailed research proposal;
c. letters expressing a commitment to the research project and to supervisory duties from three Memorial University of Newfoundland faculty members, one of whom is prepared to assume the role of Chair of the Supervisory Committee and at least one whose unit of primary responsibility is a Ph.D. granting unit;
d. letters of endorsement from the administrative heads of each of the units involved in the proposed program; and
e. a statement from the University Librarian indicating the adequacy of Library resources to satisfy the demands of the research program.
2. Normally, admission is offered for the Fall semester. The deadline for admission or readmission is January 15. Students applying for admission to the IDPhD must submit all required materials to the School of Graduate Studies on or before this deadline. Where circumstances permit, applications will be considered for the Winter and Spring semesters.

### 36.21.3 Program of Study

## 1. Courses

a. Students will normally be required to take 12-18 credit hours of courses to be determined by the Supervisory Committee. These must include at least one course from each participating discipline and may also include INTE 902A/B. Directed reading courses may be included to support the development of the thesis work.
b. Where appropriate, extra language and/or methodology courses may be prescribed. See Evaluation, Evaluation of Graduate Students, 4. concerning language(s) requirement.

## 2. Comprehensive Examination

The scope and format of the comprehensive examination shall be determined by the Supervisory Committee in consultation with the student and in accordance with the needs of the student's particular program of study. Students will be required to take a comprehensive examination no later than the end of the seventh semester of study and after the completion of all required course work. Comprehensive examinations shall follow procedures in accordance with General Regulation, Comprehensive Examinations, Ph.D. Comprehensive Examination, with the exception of 2.

## 3. Thesis

Students must complete a thesis, examined and defended in accordance with General Regulations of the School of Graduate Studies. The thesis shall give evidence of the student's ability to develop independent and original research.

### 36.21.4 Doctoral Internship

1. The School of Graduate Studies allows doctoral students, Interdisciplinary Ph.D. students, to undertake internships of work. Students approved to undertake an internship will be required to register for the Doctoral Internship course (INTE 6000). Students will be expected to obtain their own internships (with the help of supervisors when possible) and must have completed their comprehensive exams prior to starting their internships.
2. Internships must be approved by the supervisor, Director of the Interdisciplinary Ph.D. program, and Head of the academic unit (in cases where INTE 6000 is approved for a doctoral student outside of the Interdisciplinary Ph.D. program). In cases where approval is granted, students must add INTE 6000 to their program of study and register using a Course Change form.
3. The doctoral internships shall normally be one semester in duration and consist of a minimum of 420 hours of paid or unpaid work. Students undertaking the internship shall submit a concise report to their supervisors at the end of the semester while on internship. The report and performance in the internship shall be graded as pass/fail by the supervisor upon consultation with the on-site work supervisor. If a student fails to achieve a final grade of pass, and provided the student has not failed to achieve a grade of B or better in any other program course, the student may request to repeat the internship or replace with a substitute course. Only one such repeat or substitution will be permitted in a student's program. Students who drop an internship without permission, fail to honour an agreement to work with a host employer, or who conduct themselves in a manner as to cause their discharge from the internship position will normally be awarded a failed grade for the internship.

### 36.21.5 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the participating Departments will allow.
6000 Doctoral Internship
902 A/B Interdisciplinary PhD Colloquium

### 36.22 Linguistics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/linguistics
The degrees of Master of Arts and Doctor of Philosophy are offered in Linguistics.

### 36.22.1 Program of Study

1. The Degree of Doctor of Philosophy is offered in the following areas:
a. Theoretical issues in Core Areas of Grammar (phonetics, phonology, morphology, syntax, semantics);
b. Languages in which the Department has demonstrated expertise, especially languages of the Newfoundland and Labrador Area;
c. Language Acquisition; and
d. Language Variation and Language Contact.
2. In order to be admitted to the Ph.D. in Linguistics, a student shall normally hold a Master's Degree in Linguistics. In the case of a student who does not meet the above requirement but who holds a language-oriented Master's Degree, a program of additional linguistics courses, supplementary to those normally considered to be required in the Ph.D. program, may be required.
3. The program of each student must be approved by the Dean of Graduate Studies upon the recommendation of the Supervisory Committee in consultation with the Head of the Department.
4. Students who fulfill the requirement in Clause 2 and who otherwise possess the qualifications of Ph.D. students will embark on a program approved on an individual basis. This will normally include not less than 15 credit hours in graduate courses, at least 6 credit hours of which must be at the 7000-level.
5. Where needed, each program will include appropriate courses to ensure that the student will have completed 9 credit hours from graduate courses in each of two required fields selected from the following:
a. Phonetics and Phonology
b. Morphology and Syntax
c. Language Acquisition
d. Sociolinguistics
6. The student must research and write two comprehensive papers, each to be defended at an oral examination (see Regulation Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination of the General Regulations).
a. The written examinations consist of two separate research papers. These papers will be submitted to the Examination Committee. At least one of the papers must be in one of the core areas of phonetics/phonology, morphology, syntax or semantics. The topic selected for each paper must obtain the prior approval of the Graduate Studies Committee of the Department. In each of these papers, students must demonstrate knowledge of the literature on the topic selected, general mastery of the discipline of linguistics and ability to undertake independent research.
b. The Examination Committee will examine the student orally, on each paper, within one month of submission. Questioning can be as wide-ranging as the Committee deems necessary to ensure that the student displays a thorough and comprehensive knowledge of the area in question.
c. The Examination Committee shall consist of the Head of Department (or delegate) who shall Chair the Committee, the Supervisor, the Dean of Graduate Studies (or delegate), and other members necessary to satisfy General Regulation Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination, 2., who may normally include the members of the Supervisory Committee. If the Head of Department is also a member of the Supervisory Committee, an additional representative of the Department shall be appointed to chair the Examination Committee.
7. Initially, students must obtain approval for their Ph.D. thesis topics from the Graduate Studies Committee of the Department, in consultation with the Supervisory Committee. The thesis topic is normally selected before the end of the second full year in the program. Once the topic is approved, a more detailed thesis proposal must be presented to the Department in both written and oral format, and must receive formal Departmental approval prior to the writing of the thesis.
8. Proficiency in a language other than the student's first language will be required, as demonstrated by a minimum $B$ grade in a second-year language coûrse, or performance satisfactory to the Department in an arranged reading proficiency test. A structural knowledge of a non-Indo-European language is also required, as demonstrated by a minimum B grade in a field methods/language structure course or other performance satisfactory to the Department. Depending on the program, a reading knowledge of one or more additional languages may be required. Students must meet all language requirements before undertaking their comprehensive examinations.
9. All Ph.D. students are advised to consult the Linguistics department's Graduate Handbook for details on program requirements and for general information relating to the graduate program.

### 36.22.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow. Full information is to be found in the Department's Graduate Brochure.
6050-54 Structure of a North American Aboriginal Language (credit restriction: except where an exemption is supplied by the Head of the Department, a student may not obtain credit for more than one course in the 6050-54 series. Students may not obtain credit for any of the previously offered 6010, 6011, 6020, 6021, 6030, 6031, 6040, 6041 in addition to a course in the 6050-54 series.)
6055-59 Structure of an Uncommonly-Taught Language (credit restriction: Except where an exemption is supplied by the Head of the Department, a student may not obtain credit for more than one course in the 6055-59 series.)
6100 Issues in Morphosyntax (credit may not be obtained for both Linguistics 6100 and the former 6001)
6110 Selected Topics in Transformational Grammar
6115 Topics in the Syntax of A Selected Language (prerequisite: 6001 or 6110)

6150 Principles of Language Acquisition
6151 Selected Topics in Language Acquisition (prerequisite: Permission of the instructor)
6200 Phonological Theory
6201 Selected Topics in Phonology (prerequisite: 6200)
6210 Sociolinguistics (credit restriction: A student may not obtain credit for both 6210 or the former 6211)
6212 Selected Topics in Language and Gender
6220 Areal and Temporal Variations in Language
6300-09 Special Subjects
6350 General Romance Linguistics
6390 Franco-Canadian
6400 Comparative and Historical Linguistics
6401 Morphosyntactic Change (prerequisite: 6400)
6403 Etymology (cross-listed as English 6403)
6410 Comparative Structure of a Selected Language Family (prerequisite: 6011 or 6031 or 6403 )
6420 English Dialectology I
6421 English Dialectology II
6430 Selected Topics in Linguistic Variation (prerequisite: 6220 or the former 6211)
6500 Field Methods
6601 Modern Linguistic Theories
6700 Experimental Phonetics
6701 Selected Topics in Experimental Phonetics (prerequisites: 6200, 6700)
6800 Selected Topics in Morphology
6880 Selected Topics in Semantics
7000 Seminar in Research Methods
7001 Analytical issues in Linguistics
7100 Topics in North American Native Languages (prerequisites: a course from series 6050-6054 or the former 6011, 6031, 6041)
7200 Advanced Topics in Syntax (prerequisites: 6110, plus either 6001 or 6115)
7400 Seminar in Comparative and Historical Linguistics (prerequisite: 6400 or 6410)
7430 Seminar in Linguistic Variation (prerequisite: 6430)
7800 Seminar in Morpho-semantics (prerequisite: 6800)
7900-03 Special Topics in Linguistics
Note: Appropriate equivalent credits may be given for courses taken at the Summer Institute of the Linguistic Society of America, or a similar institute. Students are encouraged to attend these institutes. They should, however, consult the Head of the Department as to what courses may be appropriate for credit.

### 36.23 M.D.-Ph.D.

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/sgs

1. The M.D.-Ph.D. program is offered by full-time study to highly motivated students with an excellent academic record who wish to obtain an M.D. and a Ph.D., and whose academic excellence, research potential, and the suitability of the proposed research training environment is acceptable to the Program Admissions and Advisory Committee.
2. The purpose of the M.D.-Ph.D. program is to provide medical education, including clinical skills and training in health research.
3. The M.D.-Ph.D. program will be overseen by the Program Admissions and Advisory Committee (P.A.A.C.). The P.A.A.C. will be responsible for the recruitment and oversight of the program of highly qualified trainees.
4. The P.A.A.C. is composed of the M.D.-Ph.D. Program Director(s), a representative from the Faculty of Medicine, one or more faculty members representing the School of Graduate Studies and a senior M.D.-Ph.D student.
5. M.D.-Ph.D students are jointly enrolled in the M.D. program and the Ph.D. program. The student's Ph.D. program is overseen by the administrative Head of the appropriate academic unit in which the student is enrolled. The M.D. program is overseen by the Assistant Dean, Undergraduate Medical Education, Faculty of Medicine.

### 36.23.1 Qualifications for Admission

1. To be admitted into the M.D.-Ph.D. program, applicants must first meet the admission requirements of both the M.D. and Ph.D. programs. Admission to the Ph.D. program shall be by the Dean of Graduate Studies on the recommendation of the Head of the appropriate academic unit. Admission to the M.D. program is by the Dean of Medicine on the recommendation of the Assistant Dean, Admissions, Faculty of Medicine.
2. Normally, students will enter the M.D.-Ph.D. program from the M.D. program after successful completion of the pre-clerkship phase or from the Ph.D. program after one or two years of the graduate program and acceptance into the M.D. program.

### 36.23.2 Program of Study and Research

1. The program of study for the Ph.D. is described in the University Calendar entry for the student's chosen discipline. For the purposes of timing of the comprehensive examination, only the semesters in the Ph.D. component of the program will be counted.
2. The program of study for the M.D. follows the General Regulations governing the M.D. Degree.
3. During the Ph.D. component, students are expected to maintain clinical skills by arrangement with the Assistant Dean, Undergraduate Medical Education, Faculty of Medicine, and will be required to demonstrate competency in clinical skills before resuming full-time studies in the clerkship phase of the M.D. component.
4. During the M.D. component (including the clerkship phase), students, where required, are expected to participate in seminars and journals clubs in their area of research specialization.
5. The Ph.D. will be awarded to students in the M.D.-Ph.D. program on completion of all academic requirements appropriate to the Ph.D. Degree. The M.D. will be awarded to students in the M.D.-Ph.D. program on completion of all academic requirements appropriate to the M.D. Degree.

### 36.23.3 Evaluation

Failure to maintain academic standing in either the Ph.D. or M.D. components will lead to termination of the M.D.-Ph.D. program which will be annotated on the student's transcript. On failure of the M.D. component, the Dean of Graduate Studies may approve transfer to a Ph.D. program on the recommendation of the administrative Head of the appropriate academic unit. On failure of the Ph.D. component,
the Dean of Medicine may approve transfer to a M.D. program on the recommendation of the Assistant Dean of Undergraduate Medical Education.

### 36.23.4 Courses

See course listing under the regulations for the relevant Ph.D. program and also for the M.D. program in the General Regulations governing the M.D. degree.

### 36.24 Management

www.mun.ca/sgs/contacts/sgscontacts.php
www.business.mun.ca
The Degree of Doctor of Philosophy in Management is offered in the Faculty of Business Administration. The designation refers to management in the broad context. The Degree will offer specializations corresponding to functional areas in management. The Degree currently is offered with specializations in: (1) operations and information management, (2) organizational behaviour and human resources management, and (3) general management.
The Degree of Doctor of Philosophy in Management is offered by full-time study to qualified students. The General Regulations of the School of Graduate Studies and the Degree Regulations of the Faculty of Business Administration outlined below, will apply.

### 36.24.1 Admission to the Ph.D. Program

Admission is limited and competitive. General qualifications for admission to the Ph.D. Programs at Memorial University of Newfoundland are set out under General Regulations, Qualifications for Admission. Applicants from all disciplines will be considered.
In addition:

1. Quantitative and qualitative competency are required as evidenced by an acceptable balanced GMAT (minimum score of 600 ) (or a minimum GRE score of 302).
2. An applicant who did not complete a Master's degree at a recognized university where English is the primary language of instruction must normally complete either the: Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet-based score of 92-93 (or higher); or International English Language Testing System (IELTS) and achieve a score of 7 (or higher).
Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

### 36.24.2 Supervisory Committee

Until a supervisory committee has been formed, the Ph.D. Program Director will be the designated advisor of each Ph.D. student. Each student will have a supervisory committee consisting of three or more members, at least two of whom shall be members of the Faculty of Business Administration. The thesis Supervisor shall be a doctorally qualified faculty member in the Faculty of Business Administration, Memorial University of Newfoundland, having a recent (past five years) research track record suitable to provide research supervision at the Ph.D. level. The supervisory committee will be appointed no later than the end of the first year of studies.
Students are encouraged to find a Supervisor within the first year of the program and, together with the Supervisor, find the remaining committee members by the time all required courses are completed.

### 36.24.3 Components of Study

### 36.24.3.1 Courses

Students are required to complete successfully a program of courses, normally over the first two years of the program. Students without an adequate background in the functional areas of business may be required to take additional breadth courses. Such determination will be made by the Graduate Research Programs Committee when a student is accepted into the program.

## Required for all Specializations

Philosophy 6015 Theory of Knowledge
Business 9901 Approaches to Management Resêarch

## One of

Business 9902 Modelling Methods In Management Research
Business 9903 Quantitative Methods In Management Research*
Business 9904 Qualitative Methods In Management Research**
Business 9901 is to be completed before any of Business 9902, 9903,9904 is attempted. In exceptional cases Business 9901 may be completed concurrently with 9902, 9903 or 9904 , with approval from the Director of the Program and the Supervisor.
*Alternatively, students may elect to take an equivalent quantitative methods graduate course on the approval of the Ph.D. Program Director and the Supervisor.
**Alternatively, students may elect to take an equivalent qualitative methods graduate course on the approval of the Ph.D. Program Director and the Supervisor.
Note: Waivers shall not be granted in the Ph.D. program for previously completed course work at either the undergraduate or master's level.
Operations and Information Management (OIM) Specialization Courses
In addition to the above-noted courses required for all specializations, the following courses are required for the Operations and Information Management specialization.

1. Four of the following courses:

Business 9910 Optimization
Business 9911 Data and Process Models in Information Systems Development
Business 9912 Probabilistic Models
Business 9913 Human-Computer Interaction and Decision Support Systems
Business 9914 Supply Chains: Models and Management
Business 9915 Electronic Commerce
Business 9917 Special Topics in Operations Management

Business 9918 Special Topics in Information Systems
2. Two graduate courses subject to the approval of the Director of the Program and the Supervisor.

Recommended Sequence for Operations and Information Management (OIM) Specialization Table

| Semester | Courses |
| :---: | :---: |
| Year 1 Fall | BUSI 9901 Approaches to Management Research <br> Philosophy 6015 Theory of Knowledge <br> Two of *,**, ***: <br> BUSI 9910 Optimization <br> BUSI 9911 Data and Process Models in Information Systems Development <br> BUSI 9912 Probabilistic Models <br> BUSI 9913 Human-Computer Interaction and Decision Support Systems <br> BUSI 9914 Supply Chains: Models and Management <br> BUSI 9915 Electronic Commerce <br> BUSI 9917 Special Topics in Operations Management <br> BUSI 9918 Special Topics in Information Systems |
| Year 1 Winter | BUSI 9902 (Modelling), 9903 (Quantitative), or 9904 (Qualitative) Methods in Management Research <br> Two of *,**,***: <br> BUSI 9910 Optimization <br> BUSI 9911 Data and Process Models in Information Systems Development <br> BUSI 9912 Probabilistic Models <br> BUSI 9913 Human-Computer Interaction and Decision Support Systems <br> BUSI 9914 Supply Chains: Models and Management <br> BUSI 9915 Electronic Commerce <br> BUSI 9917 Special Topics in Operations Management <br> BUSI 9918 Special Topics in Information Systems |
| Year 1 Spring | Summer Research Project |
| $\begin{aligned} & \hline \text { Year 2 } \\ & \text { Fall } \end{aligned}$ | Two graduate courses subject to the approval of the supervisor Graduate Program in Teaching (Recommended (non-credit)) |

1.     * A selection of courses will be offered to meet the requirements of students as far as the resources of the Faculty of Business Administration will allow.
2. **Students who are planning to specialize in Information Systems are advised to take Business 9911, Business 9913, Business 9915, and Business 9918.
3. ${ }^{* * *}$ Students who are planning to specialize in Operations Management are advised to take Business 9910, Business 9912, Business 9914, and Business 9917.

Organizational Behaviour and Human Resources Management Specialization Courses
In addition to the above-noted courses required for all specializations, the following courses are required for the Organizational Behaviour and Human Resources Management specialization.

1. Required courses:

Business 9920 Foundations in Organizational Behaviour
Business 9921 Foundations in Human Resources Management
Business 9924 Current Issues in Organizational Behaviour
Business 9925 Current Issues in Human Resources Management
2. Two of:

Business 9923 Foundations in Organizational Theory
Business 9927 Current Issues in Organizational Theory
Business 9928-9939 Special Topics in Organizational Behaviour/Human Resources Management
Any other graduate course subject to the Director of the Program and the Supervisor.
Recommended Sequence for Organizational Behaviour and Human Resources Management Specialization Table

| Semester | Courses |
| :--- | :--- |
| Year 1 |  |
| Fall | BUSI 9901 Approaches to Management Research <br> BUSI 9920 Foundations of Organizational Behaviour <br> BUSS 9921 Foundations of Human Resources Management <br> Philosophy 6015 Theory of Knowledge |
| Year 1 <br> Winter | BUSI 9902 (Modelling), 9903 (Quantitative), or 9904 (Qualitative) Methods in Management Research <br> BUSI 9924 Current Issues in Organizational Behaviour <br> BUSI 9925 Current Issues in Human Resources Management |
| Year 1 <br> Spring | Summer Research Project |
| Year 2 <br> Fall | Two of: BUSI 9923, 9927, 9928-9939* or any other graduate course subject to the approval of the <br> Supervisor <br> Graduate Program in Teaching (Recommended (non-credit)) |

Note: * A selection of courses will be offered to meet the requirements of students as far as the resources of the Faculty of Business Administration will allow.

## General Management Specialization Courses

In addition to the above-noted courses required for all specializations, the following courses are required for the General Management specialization.

1. Required courses:

Business 9923 Foundations in Organizational Theory
Business 9927 Current Issues in Organizational Theory
2. Four graduate courses subject to the approval of the Director of the Program and the Supervisor

Recommended Sequence for General Management Specialization Table

| Semester | Courses |
| :--- | :--- |
| Year 1 |  |
| Fall | BUSI 9901 Approaches to Management Research <br> BUSI 9923 Foundations of Organizational Theory <br> Philosophy 6015 Theory of Knowledge <br> One graduate course subject to the approval of the Supervisor* |
| Year 1 <br> Winter | BUSI 9902 (Modelling), 9903 (Quantitative), or 9904 (Qualitative) Methods in Management <br> Research <br> BUSI 9927 Current Issues in Organizational Theory <br> One graduate course subject to the approval of the Supervisor * |
| Year 1 <br> Spring | Summer Research Project |
| Year 2 |  |
| Fall |  |

Note: * A selection of courses will be offered to meet the requirements of students as far as the resources of the Faculty of Business Administration will allow.

### 36.24.3.2 Summer Research Project

During the first summer in the program, students will complete a research project under the supervision of a qualified faculty member in the area of specialization. Projects must be presented at a Faculty of Business Administration research seminar during the second year of the program.

### 36.24.3.3 Research Seminar Participation

Students are expected to attend research seminars offered by the Faculty of Business Administration in their discipline. Presentation of student conference papers where the Faculty of Business Administration funds travel is expected at a Faculty of Business Administration research seminar. In addition, students may be requested to present their work at other Faculty seminars where and when feasible.

### 36.24.3.4 Comprehensive Examination

Students shall undertake a mandatory written comprehensive examination, following General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination, which sets out the procedures for the comprehensive examination.
In addition:

1. A student in the Ph.D. Program in Management shall normally take the written Comprehensive Examination by the end of the seventh semester of the program. The student must have successfully completed all required courses prior to writing the Comprehensive Examination. The scope of the Comprehensive Examination will be determined by the Examining Committee (as defined in General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination) under the guidance of the Supervisory Committee.
2. A list of topics/areas for the Comprehensive Examination will be provided to the student no later than three months prior to the date of the examination.
3. The written examination will take place in three phases over a one-week period.
4. Based on the results of the written examination, the Examining Committee may schedule a supplementary oral examination on any topics covered on the written examination. The oral examination request must be made to the Dean within two weeks of completion of the written examination. The oral examination, if any, must take place within six weeks of completion of the written examination.
5. The scheduling of the Comprehensive Examination will be initiated by the student's Supervisor who will notify the Dean of the Faculty of Business Administration or designate. The date of the written examination will be determined by the Dean of the School of Graduate Studies. The student will be provided with written notice of the scheduled dates of the written examinations. In the case of oral examinations, requests will be initiated by the Examining Committee or the student (as described above in 4.) through the School of Graduate Studies.

### 36.24.3.5 Ph.D. Thesis Regulations

1. The student will submit a thesis proposal to all members of the Supervisory Committee for evaluation and approval normally by the end of the eighth semester of the program. Within one month of submitting the proposal, the student will give a public oral presentation of the proposal, attended by the Committee. The presentation will provide the Committee and others in attendance with an opportunity to raise questions about the proposal research. Immediately following the presentation, the Supervisory Committee will meet to assess the proposal. Assessment will result in one of the following three outcomes: (1) accept; (2) accept with changes; or (3) reject. The results of this assessment will be provided to the student following the meeting. Assessments of accept with changes or reject will be accompanied by written comments within one week of the proposal presentation.
2. If the proposal is rejected, the student will be permitted a second proposal. This proposal must be submitted and deemed acceptable by the Supervisory Committee within four months of the original proposal presentation. Failure to resubmit within this time period will lead to termination of the student's program.
3. The Ph.D. thesis will constitute an independent and original research contribution.
4. The Ph.D. thesis will be evaluated according to the process established in General Regulation Theses and Reports, Evaluation of Ph.D. Theses governing the School of Graduate Studies.

### 36.25 Marine Biology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/osc
The Degree or Doctor of Philosophy (Ph.D) is offered in Marine Biology by full-time and part-time study through the Department of Ocean Sciences. Areas of concentration include: Biological Oceanography, Marine Ecology and Evolution, Functional Biology of Marine Organisms, Fisheries and Aquaculture, and Marine Biogeochemistry

### 36.25.1 Admission and Program of Study

1. Admission into the Ph.D. program in Marine Biology is normally restricted to students holding a Master's Degree or its equivalent. In exceptional circumstances, a student with a B.Sc. (Honours) Degree who has spent not less than 12 months in an M.Sc. Degree program may be recommended for transfer into a Ph.D. program, provided that the student can demonstrate, to the satisfaction of the Department of Ocean Sciences, the student's ability to pursue research at the doctoral level.
2. Each student will be assigned a Supervisory Committee consisting of the Supervisor and at least one other member. Within three months of the first registration in the Ph.D. degree program, a student will meet with the student's Supervisory Committee. Within nine months, the student and the Supervisory Committee will agree on a written thesis proposal outlining the objectives, methods, timetable and funding for the project, and provide the proposal (signed by the student and the supervisory committee) to the Head for inclusion in the student's file.
3. A student is normally required to complete a minimum of 6 credit hours of graduate program courses as follows:

- Ocean Sciences 7100 or 7200
- Ocean Sciences 7000 or relevant course as approved by the Supervisory Committee

4. All course requirements should be completed within five semesters from the date of first registration in the Ph.D. program
5. Normally, upon completion of required course work the student shall undertake a mandatory comprehensive examination, following the General Regulations, Comprehensive Examinations, Ph.D. and Psy.D, Comprehensive Examination. The comprehensive examination will be both written and oral. A student should consult the Departmental guidelines for further information and a detailed description of the content of the Comprehensive Examination.
6. The Ph.D. program will conclude with the examination and oral defense of the completed thesis in accordance with the School of Graduate Studies General Regulations, Theses and Reports

### 36.25.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
OCSC 7000 Graduate Core Seminar (cross-listed as Biology 7000)
OCSC 7100 Biological Oceanography
OCSC 7200 Adaptations to the Marine Environment
OCSC 7300 Plankton Dynamics
OCSC 7400 Fisheries Resource Management
OCSC 7500-7515 Special Topics in Ocean Sciences

### 36.26 Mathematics and Statistics

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/science www.mun.ca/math
The degrees of Master of Applied Statistics (see appropriate Calendar entry), Master of Science, and Doctor of Philosophy are offered in the Department of Mathematics and Statistics. The Masters' degrees are offered by full-time and part-time studies. The Department also participates in the interdisciplinary Ph.D. Program in Theoretical Physics.

### 36.26.1 Program of Study

The following regulations should be read in conjunction with the General Regulations of the School of Graduate Studies.

1. Students shall be assigned a supervisory committee consisting of the Supervisor (or Co-Supervisors) and at least two other members of faculty appointed by the Dean on the recommendation of the Head.
2. A student shall complete at least 6 credit hours in graduate courses in the area of specialization. A student may be required to take additional courses at any time during the student's program.
3. The Comprehensive Examination consists of two parts, called the "qualifying review" and the "intermediate review". Successful completion of both the qualifying and intermediate reviews constitutes successful completion of the Comprehensive Examination in the sense of General Regulation Comprehensive Examinations.
a. The qualifying review consists of written examinations and takes place once the student has successfully completed the courses specified in the student's program of study at the time of this review and the Supervisory Committee deems it appropriate. Its main purpose is to ensure that the student has a reasonably broad general knowledge of mathematics or of statistics, as appropriate.
b. The intermediate review consists of an oral presentation on the student's thesis topic followed by an oral examination based on the presentation although questions of a general nature relating to the field of specialization are also permitted. It must take place no later than the end of the student's seventh semester in the doctoral program and at least three months after the qualifying review. Its purpose is to ensure that the student has specialized knowledge in the student's chosen area sufficient to do original research of a high level.
More details concerning the Department's comprehensive examinations can be obtained from the Department.

### 36.26.2 Specific Regulations for the Ph.D. in Mathematics

A Masters Degree in mathematics or related area from a recognized university is required for entry into the Ph.D. program. Students currently registered in their first year at Memorial University of Newfoundland's M.Sc. Program in mathematics who have obtained A in at least four program courses are eligible to be transferred into a Ph.D. program. Such transfer must be supported by a prospective Ph.D.
supervisory committee as well as the Graduate Studies Committee and approved by the Dean of Graduate Studies. Transferred students shall finish their Masters program courses plus the minimum Ph.D. requirements.

### 36.26.3 Specific Regulations for the Ph.D. in Statistics

A Masters Degree in statistics from a recognized university is normally required for entry into the Ph.D. program. Students currently registered in their first year at Memorial University of Newfoundland's M.A.S. or M.Sc. Program in statistics who have obtained A in at least four program courses are eligible to be transferred into a Ph.D. program. Such transfer must be supported by a prospective Ph.D. supervisory committee as well as the Graduate Studies Committee and approved by the Dean of Graduate Studies. Transferred students shall finish their Masters program plus the minimum Ph.D. requirements.
In addition to general Departmental requirements, each student for the Ph.D. in mathematics or statistics will be required to present at least one paper at a graduate seminar on a topic to be approved by the student's Supervisor.

Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses
(Credit may be obtained for only one course from each of the pairs of courses listed in this table.)

| Present Course | Former Course | Present Course | Former Course |
| :--- | :--- | :--- | :--- |
| 6323 | 6030 | 6212 | 6080 |
| 6321 | 6032 | 6310 | 6130 |
| 6322 | 6035 | 6330 | 6200 |
| 6340 | 6040 | 6331 | 6210 |
| 6341 | 6041 | 6332 | 6350 |
| 6342 | 6042 | 6312 | 6500 |

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.

### 36.26.4.1 Mathematics

6100 Dynamical Systems
6101 Modern Perturbation Theory
6102 Mathematical Biology
6104 Infinite Dimensional Dynamical Systems
6110 Advanced General Relativity
6111 Calculus in Manifolds
6112-6119 Special Topics in Applied Mathematics
6120 Theoretical Fluid Dynamics
6121 Functional Differential Equations
6130 Introduction to General Relativity
6201 Numerical Methods for Partial Differential Equations
6202 Nonlinear and Linear Optimization (credit restricted with Computer Science 6933)
6204 Iterative Methods in Numerical Linear Algebra
6205-6209 Special Topics in Numerical Analysis
-
6210 Numerical Solution of Differential Equations (for Computational Science students only - required core course)
6212 Numerical Methods for Initial Value Problems
6230 Differentiable Manifolds and Riemannian Geometry
6300 Homology Theory
6301 Homotopy Theory
6302 Theory of Fibre Bundles
6304-6309 Special Topics in Topology
6311 Complex Analysis
6312 Measure Theory
6313 Functional Analysis II
6315-6319 Special Topics in Analysis
6320 Group Theory
6321 Ring Theory
6322 Nonassociative Algebra
6323 Homological Algebra
6324-6329 Special Topics in Algebra
6330 Analytic Number Theory
6331 Algebraic Number Theory
6340 Graph Theory
6341 Combinatorial Design Theory
6342 Advanced Enumeration
6343-6349 Special Topics in Combinatorics

### 36.26.4.2 Statistics

6503 Stochastic Processes
6505 Survival Analysis
6520 Linear Models
6530 Longitudinal Data Analysis
6540 Time Series Analysis
6545 Computational Statistics
6550 Nonparametric Statistics
6559 Statistical Exploration of Data

6561 Categorical Data Analysis
6564 Experimental Designs
6563 Sampling Theory
6571 Financial and Environmental Time Series
6573 Statistical Genetics
6570-6589 Selected Topics in Statistics and Probability (excluding 6571, 6573, 6586)
Notice that, although the courses $6160,6310,6332,6351,6500,6510$ and 6560 cannot be used to fulfill the 6 credit hours graduate courses requirement, any of them can be listed as part of the program of study as additional course work, whenever the supervisory committee deems it appropriate.

### 36.26.5 Specific Regulations for the Ph.D. in Theoretical Physics

The Ph.D. in Theoretical Physics is an interdisciplinary program offered jointly with the Department of Physics and Physical Oceanography. The regulations for this program are described under the Regulations Governing the Degree of Doctor of Philosophy - Theoretical Physics.

### 36.27 Medicine

www.mun.ca/sgs/contacts/sgscontacts.php
www.med.mun.ca
The Faculty of Medicine offers the degree of Doctor of Philosophy in seven program areas: Cancer and Development, Cardiovascular and Renal Sciences, Clinical Epidemiology, Community Health, Human Genetics, Immunology and Infectious Diseases and Neurosciences. Each program area has a Co-ordinator who is responsible for communicating the interests of the program to the Faculty of Medicine Graduate Studies Committee and participate in the admission of graduate students into the graduate program in Medicine. The Faculty of Medicine also offers the opportunity for students registered in the Doctor of Medicine (M.D.) program to obtain a Ph.D. in a combined and integrated M.D.-Ph.D. program.

### 36.27.1 Qualifications for Admission

The admission requirements for the Ph.D. are as given under the General Regulations governing Ph.D. degrees.

### 36.27.2 Program of Study and Research

1. The program of study for a Ph.D. Degree is the responsibility of the supervisory committee composed of a Supervisor and at least two other faculty members.
2. It is the responsibility of the supervisory committee to meet regularly (at least annually) with the student and to provide guidance at all stages of the student's program. An annual report prepared by the Supervisor and signed by the student and all members of the committee is required to be submitted to the Assistant Dean of Research and Graduate Studies (Medicine).
3. Graduate Students are expected to participate in Faculty of Medicine seminars and journal clubs, for some of the program areas these are available as required courses.
4. Course requirements are set by each of the program areas and are described under Program Requirements. Some supervisory committees may require some students to successfully complete specified course work.
5. Graduate Students in the Ph.D. degree are required to successfully complete the comprehensive examination before the end of the seventh semester. The comprehensive examination consists of both written and oral components and is in accordance with the General Regulations governing Ph.D. degrees.
6. Graduate students in the Ph.D. degree must complete an original piece of research, a written dissertation which must be successfully defended in an oral examination in accordance with the General Regulations governing Ph.D. degrees.

### 36.27.2.1 Program Areas

1. Cancer and Development
a. The graduate program in Cancer and Development offers study in fundamental cell and molecular biological areas including viral oncogenesis, growth factors and oncogenes in developmental models, programmed cell death and drug resistance.
b. Program Requirements: Students are required to participate in the Seminar Series (MED 6410, 6411, 6412, 6413).
2. Cardiovascular and Renal Sciences
a. The graduate program in Cardiovascular and Renal Sciences enables students to pursue research and academic studies in selected topics including hypertension and stroke, neural and endothelial control of vasculature and blood pressure as well as physiological mechanisms promoting heart failure.
b. Program Requirements: Students are required to successfully complete MED 6140 if this course has not been previously taken. Students are required to present their thesis research to the Cardiovascular and Renal Sciences group.
3. Clinical Epidemiology
a. The program in Clinical Epidemiology is aimed at university graduates intending a career in health services, faculty members seeking advanced training in clinical epidemiology, medical doctors, and other health care professionals interested in health research.
b. Program Requirements: Students are required to successfully complete the following courses if they have not been previously completed: MED 6262, MED 6250, MED 6255, and MED 6260 plus a minimum of one elective. Electives are normally chosen from MED 6095, MED 6263 and MED 6265 or as recommended by the supervisory committee and approved by the Director or Coordinator. Students are required to take the Ph.D. Seminar Series (MED 6410, 6411, 6412, 6413). MED 6250 and MED 6262 are normally completed in the Fall semester. MED 6255 and MED 6260 are normally completed In the Winter semester. The supervisory committee, with the approval of the Director or Coordinator, can recommend an alternate program of study. Students are expected to give an oral presentation or course lecture in each year of their program.
4. Community Health
a. The graduate program in Community Health enables students to pursue research and academic studies in selected topics. Students may specialize in one of the following three streams: epidemiology and biostatistics; health services and policy research; or social justice and equity in health.
b. Program Requirements: Coursework as defined by the Supervisory Committee and this would normally include the Ph.D. Seminar Series (MED 6410, 6411, 6412, 6413).

## 5. Human Genetics

a. The graduate program in Human Genetics will enable students to pursue academic studies and research in a number of areas of genetics including cancer genetics, genomics, genetics of complex traits, genetic epidemiology, gene mapping, medical genetics, birth defects, and population genetics. Faculty members from all three divisions of the Faculty of Medicine (Biomedical Sciences, Community Health and Clinical Sciences) participate in the program.
b. Program Requirements: Students are required to take the Genetics Seminar Series (MED 6410, 6411, 6412, 6413).

## 6. Immunology and Infectious Diseases

a. The Immunology and Infectious Diseases group has an interdisciplinary character and consists of faculty from biomedical science. The graduate programs are designed to provide individualized training oriented towards basic research and a solid scientific background in the discipline of immunology and infectious diseases.
b. Students are required to successfully complete two courses if they have not been previously completed. Students will choose one course from MED 6114, MED 6119, MED 6127, MED 6128, MED 6580, or any other graduate course approved by the student's supervisory committee. Some students may be required to take additional courses depending upon their thesis topic. Students are required to attend, for credit, and participate in the Immunology and Infectious Diseases Seminar Series (MED 6410-6413).
7. Neurosciences
a. The Neuroscience Program offers graduate studies in an interdisciplinary setting with the core faculty in the Division of BioMedical Sciences. Graduate students may pursue research in a number of specialty areas including the physiological basis of learning and memory, stroke and neuroplasticity, neuroregeneration, signal transduction mechanisms, neuronal circuitry, neuroimmunology, and membrane physiology.
b. Program Requirements: Normally students in the Ph.D. program are required to complete two graduate level courses in Neuroscience, one of which is to be Systems Neuroscience (MED 6196). Course selection is made on the recommendation and advice of the supervisory committee. Students are expected to attend and participate in the activities of the neuroscience group including the weekly seminar and journal club.

### 36.27.2.2 Courses

For a list of courses offered by the Faculty of Medicine refer to Courses offered for the Master of Science in Medicine.

### 36.28 Nursing

www.mun.ca/sgs/contacts/sgscontacts.php www.mun.ca/nursing
The degree of Doctor of Philosophy (Ph.D.) is offered in Nursing in areas reflective of the strength and expertise of current faculty members in the Faculty of Nursing. All students will be required to attend as full-time students during the first six semesters (two academic years) of the program.
The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies.

### 36.28.1 Qualifications for Admission

1. Admission to the program is limited and competitive.
2. To be considered for admission an applicant must normally hold a Master of Nursing degree or equivalent from a recognized university and have a strong academic record (minimum GPA of 3.4 on a scale of 4).
3. Applicants must have completed either a graduate level course(s) in research that included both qualitative and quantitative approaches with some advanced statistical analysis in the quantitative work, or a graduate level statistics course.
4. Applicants must hold an active practicing license from the Association of Registered Nurses of Newfoundland or must be currently registered as a practicing nurse in another Canadian jurisdiction. Applicants from other countries who do not meet the above criteria will be assessed on an individual bâsis and must submit proof of registration as a practicing nurse (or an equivalency) from their country or jurisdiction.
5. Applicants must submit a statement about a research focus that is compatible with expertise within the current faculty of the Faculty of Nursing.

### 36.28.2 Program of Study

1. A Supervisory Committee shall be appointed for each student in accordance with General Regulations, Supervision of the School of Graduate Studies.
2. Students normally be required to successfully complete a minimum of 18 -credit hours of program courses as follows: Nursing 7011, Nursing 7012, Nursing 7100, Nursing 7101, one of Nursing 7200-7210 (or another approved research course at the doctoral level), and one of Nursing 7300-7310 (or another approved course at the doctoral level in the area of the student's research interest). All courses will normally be completed within the first two years of the program.
3. Students will normally be required to complete a minimum of two mandatory, non-credit internships/institutes during the first two years of the program. The internships/institutes are designed to provide an opportunity for students to gain substantive knowledge of, and engage in, collaborative research and/or teaching. An internship/institute will be selected based on the student's area of interest and learning needs and will have a set or negotiated time limit during a semester depending on the nature and scope of the work.
4. Students will be required to participate in four graduate seminars per term in the Fall and Winter semesters in each of the first two academic years of the program (for a total of 16 graduate seminars).
5. Students must develop and maintain a professional portfolio that includes experience in research, teaching, and academic and professional service.
6. Students shall submit to a comprehensive examination in accordance with General Regulations, Comprehensive Examinations of the School of Graduate Studies. The Comprehensive Examination will consist of a written component and an oral component. The examination will normally be scheduled on completion of course work, but no later than the end of the student's seventh semester in the program.
7. Students must submit a written thesis proposal for presentation to the School, normally within three months of completion of the comprehensive examinations.
8. Students must submit a thesis, examined and defended in accordance with General Regulations, Theses and Reports of the

School of Graduate Studies.
9. Students are required to spend a minimum of six semesters (two academic years) in residence.
10. In keeping with the General Regulations, Period of Study for the School of Graduate Studies, the time limit to complete the degree is seven years.

### 36.28.3 Courses

A selection of the following courses will be offered to meet the requirements of students, as far as the resources of the Faculty of Nursing will allow.
7011 Nursing: The Science
7012 Nursing: The Profession
7100 Nursing Research 1: Conceptualizing Research
7101 Nursing Research 2: Conducting Research
7200-7210 Reading Courses in Research Methodology
7300-7310 Reading Courses in a Substantive Area for Research

### 36.29 Pharmacy

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/pharmacy
The Degree of Doctor of Philosophy in Pharmacy is offered to qualified students normally by full-time study. The General Regulations of the School of Graduate Studies of Memorial University of Newfoundland outlined in the current Calendar, and the Degree Regulations of the School of Pharmacy outlined below will apply. Every student in graduate studies shall comply with the General Regulations, Degree Regulations and all additional requirements of the School of Pharmacy.

### 36.29.1 Qualifications For Admission

1. Admission to the Ph.D. program is limited and competitive. Applicants must have completed an M.Sc. Degree in Pharmacy, or its equivalent in a related discipline, from a university of recognized standing.
2. Other students may be considered for admission to a Ph.D. provided that they have been registered in a M.Sc. Pharmacy program for a minimum of 12 months, and have demonstrated to the satisfaction of the Graduate Studies Committee of the School of Pharmacy an ability to pursue research at the doctoral level. Students wishing to transfer from the M.Sc. to the Ph.D. will have completed 6 credit hours. Prior to admittance to the Ph.D. program, a written thesis proposal will be submitted for assessment by the Supervisory Committee plus one additional faculty member. The recommendation of this Committee will be forwarded to the Graduate Studies Committee of the School of Pharmacy.
3. On admission to the program, a Supervisory Committee shall be appointed in accordance with General Regulation Supervision governing the School of Graduate Studies.

### 36.29.2 Program of Study and Research

1. As a minimum, each student shall successfully complete 6 credit hours as well as Pharmacy 6999 (Pharmacy Research Seminar). A minimum grade of $65 \%$ will be required in each course. Students shall complete additional undergraduate courses in Pharmacy or other related areas where the Supervisory Committee considers there to be a deficiency in the academic record. Students may select these courses in consultation with the Supervisory Committee. However, it will be the primary responsibility of the Supervisory Committee to ensure that deficiencies in the academic record are rectified.
2. All students must submit a thesis proposal to the Supervisory Committee for approval no later than the second semester of study after admission to the program.
3. All students must complete a comprehensive examination on or before the end of the sixth semester of study after admission to the program. The comprehensive examination will consist of two components: a written examination and an oral examination. The oral examination will normally be held no later than two weeks after successful completion of the written examination.
4. A Comprehensive Examination Committee shall be appointed in accordance with General Regulation Comprehensive Examination. The Committee will be responsible for preparing the questions for the written and oral examinations and evaluating the student's performance in the subject area. The Committee will consist of the Dean of Graduate Studies (or delegate), the Supervisor, and three other members, one of whom may be a member of the Supervisory Committee. All shall be voting members of the Committee except the Dean of Graduate Studies (or delegate).
5. Successful completion of the Ph.D program will require formal examination of the written thesis and an oral defence of the research, as prescribed in the General Regulation Theses and Reports. Final approval of the thesis shall be the responsibility of the School of Graduate Studies.

### 36.29.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students as far as the resources of the School will allow. Permission of the instructor and the Graduate Studies Committee of the School of Pharmacy is required for admission to any graduate Pharmacy course.
6000 Medicinal Chemistry
6001 Advanced Physical Pharmacy
6002 Dosage Form Design and Novel Drug Delivery Systems
6003 Pharmacokinetic Modelling
6004 Principles of General Pharmacology
6005 Toxicology of Therapeutic Agents and Chemicals
6006 Health Economics
6100-6108 Special Topics in Pharmacy
6999 Pharmacy Research Seminar

### 36.30 Philosophy

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/philosophy
The degree of Doctor of Philosophy (Ph.D.) is offered in Philosophy by full-time study only. Graduate courses are taught as small seminars and directed reading courses. Program students must spend a minimum of two years in residence at this institution.

### 36.30.1 Program of Study

1. The Ph.D. in Philosophy is offered in accordance with the General Regulations of the School of Graduate Studies. Doctoral students will specialize in one or more of three departmental research clusters:

- Metaphysics and its History
- Kant and Continental Philosophy
- Ethics, Social and Political Philosophy

2. To be considered for admission to the program an applicant must have completed a Master of Arts Degree in Philosophy or hold an equivalent qualification.
3. All students are required to complete 15 credit hours in graduate courses selected from the Courses listed below and including the following:

- Philosophy 6000
- Four additional courses (12 credit hours) only one of which (3 credit hours) may be a directed reading courses. Courses will be selected by the student in consultation with the student's Supervisory Committee.

4. Proficiency in a second language is required since it is necessary for the purpose of the proposed doctoral research. The selection of a second language is based upon the student's research requirements, and the selection is to be made in consultation with the student's faculty advisor or supervisor. Confirmation that the choice is acceptable must be obtained from the department. Demonstration of proficiency will be determined in accordance with the governing general regulation of the School of Graduate Studies (General Regulations, Evaluation, Evaluation of Graduate Students). If a student is working in recent Anglo American philosophy, then the student can opt, with the permission of the Graduate Studies Committee, to complete an examination in philosophical logic. The language requirement must normally be fulfilled before a student takes the Ph.D. comprehensive examination.
5. The Ph.D. Comprehensive Examination shall be administered and evaluated in accordance with General Regulations, Comprehensive Examinations. The examination shall consist of three written parts: a four-hour examination in the student's area of concentration and two three-hour examinations in two of the Department's research clusters (Metaphysics and its History, Kant and Continental Philosophy, and Ethics and Social and Political Philosophy).
6. No more than seven semesters after having been admitted to the program the student must submit a thesis proposal that is considered satisfactory by the supervisory committee.
7. Students must submit and successfully defend a thesis in accordance with the School of Graduate Studies general regulations governing Theses and Reports.

### 36.30.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Graduate Seminar
History of Philosophy Seminars
6011 Ancient and Medieval Philosophy
6012 Modern Philosophy
6013 Contemporary Philosophy
Area Seminars
6014 Metaphysics
6015 Theory of Knowledge
6016 Ethical and Political Theory

## Tutorials

6040-6099 Special Topics
6101 Selected Texts
6102 Current Issues

### 36.31 Physics and Physical Oceanography

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/physics
The following Departmental Regulations are supplementary to the General Regulations governing the M.Sc. and Ph.D. degrees. A thorough familiarity with the latter Regulations should be regarded as the prerequisite to further reading in this section.
The Department of Physics and Physical Oceanography compiles, and regularly reviews, a brochure which contains reasonably detailed descriptions of currently active research projects, as well as a comprehensive listing of recent research publications, and other material which may be of interest to prospective graduate students.

### 36.31.1 Program of Study

The Degree of Doctor of Philosophy (Ph.D.) is offered in Atomic and Molecular Physics, in Physical Oceanography, in Condensed Matter Physics, and in Theoretical Physics.

1. A program of study for the Ph.D. Degree in Atomic and Molecular Physics, Condensed Matter Physics or Physical Oceanography shall normally include a minimum of 9 graduate credit hours, beyond those required for the M.Sc. Degree. However, depending on the student's background and area of specialization, more or fewer graduate and/or undergraduate courses may be required.
2. A Comprehensive Examination (as prescribed under General Regulation Comprehensive Examinations) shall be an oral one, and
may include the presentation of a written research proposal.
3. The Ph.D. Program in Theoretical Physics is an interdisciplinary program offered jointly with the Department of Mathematics and Statistics. The regulations for this program are described under the Regulations Governing the Degree of Doctor of Philosophy Theoretical Physics.

### 36.31.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Condensed Matter Physics I
6001 Condensed Matter Physics II
6002 Superconductivity
6003 Path Integral Techniques in Condensed Matter Physics
6010-19 Special Topics in Condensed Matter Physics
6040 Biophysics
6060-69 Special Topics in Interdisciplinary Areas
6200 Nonlinear Dynamics
6308 Ocean Dynamics I
6309 Ocean Dynamics II
6310 Physical Oceanography
6313 Physical Fluid Dynamics
6314 Field Oceanography
6315 Polar Oceanography
6316 Ocean Measurements and Data Analysis
6317 Ocean Acoustics
6318 Numerical Modelling
6319 Climate Dynamics
6320 Turbulence
6321 Coastal Oceanography
6322 Stratified Fluids
6323 Stability Theory
6324 Models in Ocean Ecology
6360-69 (excluding 6363) Special Topics in Physical Oceanography
6363 Laboratory Experiments in Geophysical Fluid Dynamics
6400 Statistical Mechanics
6402 Theory of Phase Transitions
6403 Stochastic Processes, Time-Dependent and NonEquilibrium Statistical Mechanics
6413 Soft Matter Physics
6502 Electrodynamics
6720 Theory of Molecules
6721 Molecular Spectroscopy
6722 Light Scattering Spectroscopy
6730 Molecular Theory of Liquids and Compressed Gases
6740 Physics of Atomic Collisions
6760-69 Special Topics in Atomic and Molecular Physics
6800 Group Theory
6810-19 Special Topics in Theoretical and Mathematical Physics
6850 Quantum Mechanics I
6851 Quantum Mechanics II
6900 Techniques in Experimental Condensed Matter Physics
6910-19 Special Topics in Experimental and Applied Physics
Table of Credit Restrictions - Physics and Physical Oceanography
(Credit may be obtained for only one course from each of the pairs of courses listed in this table.)

| Present Course | Former Course | Present Course | Former Course |
| :--- | :--- | :--- | :--- |
| 6000 | 6050 | 6318 | 6304 |
| 6001 | 6051 | 6321 | 6303 |
| 6002 | 6822 | 6321 | 6304 |
| 6003 | 6820 | 6323 | 6303 |
| 6200 | 6821 | 6402 | 6401 |
| 6308 | 6312 | 6403 | 6401 |
| 6309 | 6311 | 6301 | 6503 |
| 6313 | 6302 | 6502 | 6824 |
| 6316 | 6323 |  | 6500 |

Members of the Department carry out research in several areas of experimental and theoretical physics, including atomic and molecular physics, condensed matter physics, physical oceanography, theoretical geophysics and applied nuclear physics. In atomic and molecular physics, there are experimental programs in collision-induced infrared absorption spectroscopy, electron emission spectroscopy of simple molecules, molecular ions and free radicals, laser-induced fluorescence spectroscopy, and Raman spectroscopy, and theoretical work on atomic and molecular collisions. The work in condensed matter physics includes experimental programs in solid state nuclear magnetic resonance on systems of biophysical interest, Raman spectroscopy of lipid bilayers and membranes, studies of phase transitions using Brillouin and Raman spectroscopy, studies of instabilities and pattern formation in simple
fluid dynamical systems, and spectroscopic studies of molecular crystals. Theoretical condensed matter physics research involves studies of magnetism, superconductivity, and the statistical mechanics of polymers and lipid bilayers. The Physical Oceanography group carries out field and laboratory research on several projects which take advantage of Newfoundland's unique oceanographic environment, using acoustic and other remote sensing techniques. These include studies of circulation on the Newfoundland and Labrador shelves, Labrador current dynamics, fjord dynamics, submarine canyons and sediment transport dynamics in the nearshore zone and on the shelf. Theoretical oceanographic studies involve the modelling of ocean circulation, gravity wave phenomena and other aspects of ocean dynamics. Research in theoretical geophysics is concentrated on whole-Earth dynamics, with special emphasis on the physics of the liquid core (the Earth's "third ocean") as inferred from its wave spectrum and the associated momentum transfer to the deformable solid parts of the Earth. In nuclear physics, research is done on the atmospheric concentrations of radioactive elements and on dosimetry for medical applications.
Note: For Geophysics, see Earth Sciences.

### 36.32 Psychology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/psychology
The Degree of Master of Science (M.Sc.) is offered in Experimental Psychology. Interested students should also see the Master of Science in Cognitive and Behavioural Ecology. The Degree of Doctor of Philosophy is offered in Experimental Psychology. Interested students may wish to consult the section in the Calendar describing the Doctor of Philosophy in Cognitive and Behavioural Ecology program.

### 36.32.1 Admission

An applicant must hold either a Master's Degree or an Honours Bachelor's Degree with first class standing to be considered for admission.

### 36.32.2 Program of Study



1. The program of study will be specified at the time of admission. Decisions on (a) whether to include courses in the program, and if so, (b) which specific courses are to be included will be based on the student's background and the proposed thesis topic.

## 2. Comprehensive Examination

The Ph.D. comprehensive in Experimental Psychology shall be taken during the first year of the student's program. The examination will consist of two parts. Part 1 consists of a broad review of the literature that normally pertains to the topic of the thesis area. The literature review should incorporate theoretical, methodological, and empirical findings. Part 2 consists of an oral defence of the literature review. The comprehensive exam aims to ensure that the student is knowledgeable about the range of theories, methodologies, and empirical findings that are fundamental to the chosen field of study.

### 36.32.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6000 Advanced Statistics in Psychology
6001 Research Design
6010 Colloquium Series in Psychology (repeatable, non-credit)
6100-6130 Special Topics in Experimental Psychology
6200 Learning I
6201 Learning II
6203 Behavioural Pharmacology
6210 Behavioural Analysis of Toxins
6351 Behavioural Ecology and Sociobiology (cross-listed as CABE 6351)
6400 Theory and Methods in Social Psychology
6401 Social Cognition
6402 Group Processes
6403 Program Evaluation and Applied Research
6404 Project in Applied Psychological Science (This course is open only to students in the Master of Applied Psychological Science )
6500 Developmental Psychology I
6501 Developmental Psychology II
6502 Developmental Changes During Old Age
6700 Perception
6710 Human Information Processing
6720 Human Memory
6800 Behâvioural Neuroscience
6801 Behavioural Neuroscience II
6810 Psychometrics
6910 Personality
6990 Doctoral Seminar 1
6991 Doctoral Seminar II
6992 Doctoral Seminar in Cognitive and Behavioural Ecology (cross-listed as CABE 6992)
699A/B Core Graduate Seminar in Psychology

### 36.33 Scientific Computing

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science

### 36.33.1 General Information

The Faculty of Science offers a program in Scientific Computing leading to a Doctor of Philosophy (Ph.D.). Full-time and part-time options are available.

### 36.33.2 Qualifications for Admission

To be considered for admission,

1. Applicants shall normally hold an M.Sc. degree in Scientific Computing, or equivalent, from a university of recognized standing, or
2. Applicants shall normally hold an M.Eng. or an M.Sc. degree in an appropriate discipline from a university of recognized standing, or
3. Students currently registered in the Master of Science (Scientific Computing), after a minimum of 12 months of successful performance in their program of studies, may be recommended for transfer into the Ph.D. program, provided that the students can demonstrate, to the satisfaction of the Board of Study, an ability to pursue research at the doctoral level. This transfer normally occurs no later than the fifth semester of the student's M.Sc. program.
4. In exceptional cases, applicants holding a B.Sc. (Honours or equivalent) degree in an appropriate discipline that included completion of a thesis or dissertation from a university of recognized standing, may be considered for direct admission into the PhD program.

### 36.33.3 Program of Study

The supervisory committee, in consultation with the Board of Study, will determine the minimum course requirements and the program of study for each Ph.D. student in Scientific Computing. Substitutions for courses on the list of core scientific computing courses are possible. Given the interdisciplinary nature of the program, the following guidelines would be followed:

1. Students who have completed an M.Sc. degree in Scientific Computing or equivalent will be required to complete two courses (6 credit hours) chosen from the list of core courses or two courses ( 6 credit hours) from the application area as appropriate.
2. Students who have completed an M.Eng. or a disciplinary M.Sc. degree will be required to complete four courses ( 12 credit hours). Normally, three ( 9 credit hours) of these courses would be chosen from the list of core courses to ensure sufficient training in scientific computing.
3. Students who transfer to the Ph.D. program from the Master of Science (Scientific Computing) program are required to complete six courses ( 18 credit hours) in total. Normally three to four of these courses would be from the list of core courses.
4. Students holding a B.Sc (honours or equivalent) degree who are directly admitted into the program will be required to complete six courses ( 18 credit hours). Normally three to four of these courses would be from the list of core courses.
5. Students are required to pass a single Comprehensive Examination as prescribed under General Regulations, Comprehensive Examinations, Ph.D. Comprehensive Examination. This shall be an oral exam, and may include the presentation of a written research proposal.
6. Upon completion of the work for the thesis, each student is required to present a seminar suitable for the interdisciplinary audience of Scientific Computing program students.
The submission of an acceptable thesis is required. The thesis is to contain an original scholarly contribution which must be submitted to the School of Graduate Studies for final examination. The thesis must be written in a format according to procedures outlined in Guidelines for Theses and Reports by the School of Graduate Studies at www.mun.ca/sgs/go/guid_policies/theses.php.

### 36.33.4 Courses

## Computational Science

6910 Matrix Computations and Applications or COMP 6732 Matrix Computations (credit may be obtained for only one CMSC 6910 and COMP 6732)
6920 Scientific Programming
6930 Algorithms for Distributed and Shared Memory Computers
6950 Computer Based Tools and Applications (credit may be obtained for only one of CMSC 6950 and the former CMSC 6940)
Computer Science
69016 Topics In Numerical Methods (credit may be obtained for only one of COMP 6906 and COMP 6731)

## Mathematics

6201 Numerical Methods for Time Dependent Partial Differential Equations
6202 Nonlinear and Linear Optimization
6204 Iterate Methods in Numerical Linear Algebra
6210 Numerical Solutions of Differential Equations

### 36.34 Social Work

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/socwrk

### 36.34.1 Program of Study

The degrees of Master of Social Work and Doctor of Philosophy are offered in Social Work.
Course work commences in the Spring Semester and is completed over five semesters. The program includes two Spring Semester residencies, at which time students must attend on a full-time basis, and Fall and Winter semester courses which can be taken on or away from Campus.

1. An applicant for admission to the Ph.D. program in Social Work must hold a Master's Degree in social work, or equivalent professional social work Degree as determined by the Graduate Studies Committee of the School of Social Work. All applicants should also have a minimum of three years post-B.S.W. practice experience.
2. All Ph.D. students in the social work program must complete at least 24 credit hours in regulation graduate courses. These include:
a. 6 credit hours in foundation courses ( 7010 and 7020)
b. 6 credit hours in advanced practice courses ( 7310,7320 ); or 3 credit hours in advanced practice courses (7310) and 3 credit hours on social work education (7510)
c. 9 credit hours on research ( 7411,7421 , and 7431 )
d. one internship chosen from the Internships on Advanced Social Work Practice (7910), Social Work Education (7920), or Applied Social Work Research (7930).
3. Comprehensive Examination
a. A student registered in a Ph.D. program in Social Work shall normally take the Comprehensive Examination no later than the seventh semester in the program. Prior to proceeding to the Comprehensive Examination, students must have completed all
required course work and the internship.
b. The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Dean (School of Social Work). It shall consist of:
i. the Ph.D. Program Co-ordinator who will serve as representative of the Dean of the School of Social Work and who shall occupy the Chair
ii. the student's Supervisor
iii. the Dean of Graduate Studies or delegate
iv. three other members recommended by the Dean of the School of Social Work. One of these normally will be on the student's Supervisory Committee.
Including the Supervisor, no more than two members of the Examination Committee may be nominated from the student's Supervisory Committee. All members of the Examination Committee, including the Chair, but excluding the Dean of Graduate Studies or delegate, shall be voting members.
c. The Ph.D. Comprehensive Examination in Social Work will consist of a written paper and an oral defence. In the paper, the student will contextualize the student's substantive area using theories that inform social work and develop a research design relevant to this substantive area. The student will demonstrate a contextualized and in-depth understanding of the philosophical and theoretical frameworks informing the student's substantive area, including major critiques from competing theoretical, philosophical and historical understandings. In addition, the paper will demonstrate a thorough understanding of relevant methodological considerations and a justification for the choices made within the research design. The student will identify an area of empirical research that may be undertaken and will prepare a written paper that includes: an introduction of the substantive area and a formulation of the research question; a literature review that is consistent with the question, and which both presents a critical evaluation of the theoretical and research literature and synthesizes this literature into the student's own theoretical framework; a research design for answering the research question, including a critical analysis of the chosen methodology as well as the methods of data collection, data analysis and ethical considerations. The focus and content of the written work will be defined by the Examination Committee in consultation with the student and will be approved by the Chair of the Ph.D. Program in the School of Social Work. The body of the paper will be no less than 50 pages and not more than 75 pages. It shall be defended orally. The student shall have 13 weeks to submit the paper for examination, following the comprehensive exam process approved by the Ph.D. Studies Committee.
d. The Ph.D. examination procedure shall be initiated by the student's Supervisor who will notify, in writing, the Dean (School of Social Work) of the student's readiness. The student's Examination Committee will then be appointed according to section 3.b. (above).
e. Following the oral defence, the Examination Committee shall meet in camera to arrive at its conclusions. Evaluation of the student will be based on the following criteria:
i. demonstration of knowledge of social work theory, research, and issues relevant to the topic of inquiry in both the written and oral presentation.
ii. coherency of oral presentation and written paper (i.e. conceptualization, cogent argumentation, sufficient referencing of statements, clear writing style).
f. The Chair shall report the results of the examination to the Dean of Graduate Studies in accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination, 4.
4. Ph.D. Thesis
a. A Supervisory Committee will be appointed for each student as indicated under the General Regulation Supervision.
b. The student must submit a thesis proposal to the Supervisory Committee based on the student's own interest, and normally the proposal must be approved by the end of the eighth semester of the program. The proposal will be circulated to the Supervisory Committee for critical evaluation. The Chairperson of the Supervisory Committee will inform the student within one month of its acceptance, rejection, or acceptance with recommended changes.
c. If the proposal is not acceptable, the student will normally be permitted a second attempt. The revised proposal must be submitted within a semester. Failure to resubmit within this time period will lead to termination of the student's program.
d. The thesis shall give evidence of the student's ability to carry out independent and original research, develop the necessary theoretical and methodological framework and analyses and present the findings in a scholarly manner.

### 36.34.2 Courses

The following courses that are offered during the spring semester residency will be offered every other year, as far as the resources of the School will allow.
7010 Philosophical and Historical Base of Social Work Practice (S*)
7020 Critical Thinking for Social Work Practice (S)
7310 Tutorial on Field of Practice ( $F^{* *}$ or $W^{* * *}$ )
7320 Tutorial in Advanced Social Work Practice (S)
7411 Philosophy of Science and Research Design (S)
7421 Qualitative Data Analysis (S)
7431 Quantitative Data Analysis (S)
7510 Social Work Education (S)
7910 Internship on Advanced Social Work Practice (F)
7920 Internship on Social Work Education (F)
7930 Internship on Applied Social Work Research (F)
*S = Spring Semester, **F = Fall Semester, ${ }^{* * *}$ W = Winter Semester

### 36.35 Sociology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/hss
www.mun.ca/soc
The Doctor of Philosophy (Ph.D.) is offered in Sociology by full-time and part-time study. Graduate courses are taught as tutorials or small seminars.

### 36.35.1 Program of Study

1. The Ph.D. degree in Sociology is offered in accordance with General Regulations and current department strengths.
2. To be admitted to the program an applicant must have completed either a Master of Arts or Master of Philosophy Degree or hold an equivalent qualification.
3. All Ph.D. students normally complete a minimum of 12 credit hours in graduate courses in Sociology, including the Sociology Graduate Seminar (6880), Social Theory (6150), Advanced Quantitative Methods (6040), and Advanced Qualitative Methods (6041), if these or equivalent courses have not been taken previously.
The supervisory committee in consultation with the Head or Graduate Officer will determine which additional courses, if any, may be required to ensure that students undertake appropriate course work in their area of research.
4. Proficiency in a second language will be required when the student's supervisory committee determines that knowledge of this second language is necessary for the purpose of the proposed doctoral research.
5. A written comprehensive examination, followed by a supplementary oral examination, shall normally be completed by full-time students by the end of the 5th semester of the program. Normally, part-time students shall take the examination within one year of the completion of prescribed courses. In accordance with General Regulations, Comprehensive Examinations, students must demonstrate knowledge of their special areas of research within the context of the discipline of Sóciology. The examination shall consist of two components: a written and an oral examination. The written component shall be comprised of two essays: one in a broad area (e.g. theory, methods, social inequality, etc.) and a second in the student's area of specialization. The oral component will examine the student in areas covered by the written component.
6. No more than two years after having been admitted to the program the student must submit a thesis proposal that is considered satisfactory by the Supervisory Committee.

### 36.35.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of students, as far as the resources of the Department will allow.
6040 Advanced Quantitative Methods
6041 Advanced Qualitative Methods
6042-49 Special Topics in Advanced Sociology
6090-94 Special Area in Sociology
6120 Social Organization
6130 Social Stratification
6140 The Community
6150 Social Theory
6160 Theory Construction and Explanation in Sociology
6240 Sociology in Medicine
6280 Social and Economic Development
6300 Maritime Sociology
6310 Political Sociology
6320 Gender and Society
6330 Science and Technology
6340 Comparative North Atlantic Societies
6350 Environmental Sociology
6360 Sociology of Work
6370 Feminist Theory and Methods
6380 Women, Nature, Science and Technology
6390 Sociology of Culture
6610 Socialization
6620 Current Topics in Social Behaviour
6880 Sociology Graduate Seminar

### 36.36 Theoretical Physics

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/math
www.mun.ca/physic

### 36.36.1 General Information

1. The Theoretical Physics Program is an interdisciplinary Doctor of Philosophy program offered jointly by the Department of Mathematics and Statistics and the Department of Physics and Physical Oceanography. It is broadly based and includes several subdisciplines with the common denominator that each applies advanced mathematical techniques to the study of physical problems. The subdisciplines include, though are not necessarily limited to, theoretical astrophysics, general relativity, partial differential equations of mathematical physics, quantum mechanics, classical and quantum field theory, theoretical condensed matter physics, many-body theory, advanced classical mechanics and non-linear processes, and theoretical and geophysical fluid mechanics.
2. The program is administered by the Board of Studies which is appointed by the Dean of Science in consultation with those faculty members active in the program. The Board of Studies will consist of two members from the Department of Physics and Physical Oceanography and two members from the Department of Mathematics and Statistics. The Program Chair is elected by the Board of Studies and appointed by the Dean of Science. Responsibilities of the Board include making recommendations to the School of Graduate Studies concerning admissions to the program, determining course requirements, and administering comprehensive
exams. It also determines minimum levels of funding, administers the School of Graduate Studies and Graduate Teaching Assistant budgets, and monitors' students' annual progress through the submission of annual supervisory committee reports.

### 36.36.2 Program of Study

The following regulations should be read in conjunction with the General Regulations:

1. A program of study for the Ph.D. Degree in Theoretical Physics shall normally include a minimum of 9 graduate credit hours in courses offered by the Department of Mathematics and Statistics and/or the Department of Physics and Physical Oceanography. The courses will be determined by the student's supervisory committee in consultation with the Program Chair and approved by the Board of Studies. In special circumstances more or fewer graduate courses and/or undergraduate courses may be required.
2. Students are required to pass a single Comprehensive Examination as prescribed under Comprehensive Examinations, Ph.D. Comprehensive Examination. This shall be an oral one, and may include the presentation of a written research proposal.
3. The most important requirement is the writing of a doctoral thesis which demonstrates the student's ability to independently and originally attack and solve a significant problem in theoretical physics. The thesis must definitively advance the subject which it treats.

## 37 Regulations Governing the Degree of Doctor of Psychology

www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science www.mun.ca/psychology
The Doctor of Psychology (Psy.D.) degree in clinical psychology is offered by the Department of Psychology in partnership with the University Counselling Centre. This program is designed to train professional psychologists at the doctoral level within a scholarpractitioner orientation to provide a variety of psychological services to individuals, families and communities. The program was designed to meet all of the requirements for registration with the Newfoundland and Labrador Psychology Board and to meet the accreditation standards of the Canadian Psychological Association.

### 37.1 Administration



1. The Psy.D. Program Director, who must be a registered Psychologist and hold a full-time faculty position in the Department of Psychology at Memorial University of Newfoundland, is appointed by the Head of the Department of Psychology following a consultative process that includes the faculty most directly associated with the Psy.D. program.
2. The Psy.D. Administrative Committee consists of the Director and representatives from academic units involved in the program, Eastern Health, the Association of Psychology in Newfoundland and Labrador and the Psy.D. student body. The Head of the Department of Psychology, on the recommendation of the Director, appoints Committee members. The student representative is elected by the Psy.D. students.
3. The Psy.D. Administrative Committee is chaired by the Director, and is the main body for developing and monitoring policy, procedures, and program content. The administrative committee makes recommendations concerning admission and termination, financial support, thesis and comprehensive committees, and thesis topics and examiners. The Committee oversees individual student programs of study and monitors their annual progress.

### 37.2 Admission Criteria

1. Students with Master's level degrees who wish to be considered for the program must have completed the undergraduate degree in Psychology and the undergraduate course requirements described below
2. Applicants are required to have an undergraduate Honours degree in psychology that includes an Honour's thesis as well as courses in each of the following areas:
a. abnormal psychology
b. cognition
c. developmental psychology
d. history and systems
e. learning theory
f. neuroscience
g. research design
h. social psychology
i. statistics
3. Admission to the program is competitive. Applicants will be ranked according to academic aptitude, personal and interpersonal competence, clinical and professional potential, and availability of a supervisor. The application shall include academic transcripts, results of the Graduate Record Examination (verbal, quantitative and analytical subtests), three letters of recommendation and a statement of interests and objectives. One letter of recommendation must specifically address the suitability of the applicant for clinical work. Applicants who are short-listed will be interviewed, either in person or via telephone. Work experience, research experience, extra-curricular activities, and clinically relevant public service will be taken into consideration.

### 37.3 Program of Study

Students are required to successfully complete at least 63 credit hours in regulation graduate courses. These include:
a. 6 credit hours in statistics and research design courses $(6000,6602)$;
b. 30 credit hours in core courses ( $6611,6612,6620,6623,6630,6631,6632,6633,6650,6670$ ); and
c. 27 credit hours in practicum courses (7010, 7020, 7022, 7030, 7031, 7032, 7033, 7034, 7035).

Students must also complete a year-long internship, pass a comprehensive exam and successfully complete a research thesis.

### 37.3.1 Comprehensive Examination

The Psy.D. comprehensive exam, consisting of a written and an oral component, shall be taken during the second year of the program. The exam is intended to demonstrate clinical application of the knowledge acquired through course work and practica. The
comprehensive exam will be administered according to the guidelines prescribed in the University Calendar for Ph.D. comprehensive examinations.

### 37.3.2 Thesis

Students will complete a thesis that is applied in nature and relevant to the practice and science of clinical psychology and the communities it serves. The School of Graduate Studies General Regulations, Evaluation of Ph.D. and Psy.D. Theses concerning evaluation of Ph.D. theses will be followed.

### 37.3.3 Predoctoral Internship

All students will be required to complete a twelve-month, 1750 clock-hour predoctoral internship.

### 37.4 Courses

6000 Advanced Statistics
6001 Research Design
6602 Research Design in Clinical Psychology
6611 Ethics of Professional Practice
6612 Adult Psychopathology
6614 Selected Topics in Psychopathology
6620 Principles of Adult Assessment and Diagnosis
6621 Principles of Child Assessment and Diagnosis
6622 Selected Topics in Assessment and Diagnosis
6623 Child Psychopathology, Assessment and Diagnosis
6630 Principles of Intervention with Adults
6631 Principles of Intervention with Children
6632 Community Interventions
6633 Clinical Psychopharmacology
6634 Selected Topics in Intervention
6640 Consultation Processes
6650 Supervision
6660-6669 Special Topics in Clinical Psychology
6670 Interprofessional Education (3 credit hours over six terms: Fall and Winter terms for Years 1, 2, and 3)
7010 Practicum in Ethics and Relationship Skills
7020 Practicum in Adult Assessment and Diagnosis
7022 Practicum in Child Assessment and Diagnosis
7030 Practicum in Assessment and Intervention I
7031 Practicum in Assessment and Intervention II
7032 Practicum in Assessment and Intervention III
7033 Practicum in Advanced Assessment and Intervention I
7034 Practicum in Advanced Assessment and Intervention II
7035 Practicum in Rural Intervention and Interprofessional Practice
7050 Practicum in Supervision I
7051 Practicum in Supervision II

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For an explanation of terms used in this Calendar, see the Glossary of Terms Used in This Calendar. When the designations Grenfell and Marine are used, they it indicate references specific to Grenfell Campus and the Fisheries and Marine Institute respectively.

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[^0]:    Notes

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[^30]:    $\overline{\mathrm{AR}}=$ Attendance requirement; $\mathrm{CH}=$ Credit hours are 3 unless otherwise noted; $\mathrm{CO}=$ Co-requisite(s); $\mathrm{CR}=$ Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; $\mathrm{LH}=$ Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR = Prerequisite(s); UL = Usage limitation(s).

[^31]:    www.mun.ca/sgs/contacts/sgscontacts.php
    www.mun.ca/educ
    The Master of Education (M.Ed.) is offered in the following areas: Educational Leadership Studies, Curriculum, Teaching and Learning Studies, Counselling Psychology, Post-Secondary Studies, and Educational Technology.
    In addition, a Master of Arts and Education (Education and Francophone Literatures and Cultures), jointly offered by the Faculty of Education and the Faculty of Humanities and Social Sciences, Department of Modern Languages, Literatures and Cultures, is available for students who wish to specialize in the study and teaching of French.
    In the case of the following general program regulations and the specific program regulations, which govern all Master of Education Degree programs, Dean refers to the Dean of Graduate Studies, Dean of Education refers to the Office of the Dean, Faculty of

[^32]:    Note: If students elect to take both Sociology 6030 and Business 9013, one will be counted as an elective and the other as required.

