<table>
<thead>
<tr>
<th>6.8</th>
<th>Economics</th>
<th>521</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8.1</td>
<td>Qualifications for Admission</td>
<td>521</td>
</tr>
<tr>
<td>6.8.2</td>
<td>Programs of Study</td>
<td>521</td>
</tr>
<tr>
<td>6.8.3</td>
<td>Courses</td>
<td>522</td>
</tr>
<tr>
<td>6.9</td>
<td>English Language and Literature</td>
<td>522</td>
</tr>
<tr>
<td>6.9.1</td>
<td>Master of Arts</td>
<td>522</td>
</tr>
<tr>
<td>6.9.2</td>
<td>Program of Study</td>
<td>522</td>
</tr>
<tr>
<td>6.9.3</td>
<td>Courses</td>
<td>523</td>
</tr>
<tr>
<td>6.10</td>
<td>Ethnomusicology</td>
<td>524</td>
</tr>
<tr>
<td>6.10.1</td>
<td>Qualifications for Admission</td>
<td>524</td>
</tr>
<tr>
<td>6.10.2</td>
<td>Program Requirements</td>
<td>524</td>
</tr>
<tr>
<td>6.10.3</td>
<td>Courses</td>
<td>524</td>
</tr>
<tr>
<td>6.11</td>
<td>Folklore</td>
<td>525</td>
</tr>
<tr>
<td>6.11.1</td>
<td>Master of Arts</td>
<td>525</td>
</tr>
<tr>
<td>6.11.2</td>
<td>Courses</td>
<td>526</td>
</tr>
<tr>
<td>6.11.3</td>
<td>Folklore and Language Archive (MUNFLA)</td>
<td>527</td>
</tr>
<tr>
<td>6.12</td>
<td>French</td>
<td>528</td>
</tr>
<tr>
<td>6.12.1</td>
<td>Courses</td>
<td>529</td>
</tr>
<tr>
<td>6.13</td>
<td>Geography</td>
<td>530</td>
</tr>
<tr>
<td>6.13.1</td>
<td>Courses</td>
<td>530</td>
</tr>
<tr>
<td>6.14</td>
<td>German</td>
<td>530</td>
</tr>
<tr>
<td>6.14.1</td>
<td>Courses</td>
<td>531</td>
</tr>
<tr>
<td>6.15</td>
<td>History</td>
<td>531</td>
</tr>
<tr>
<td>6.15.1</td>
<td>Master of Arts</td>
<td>531</td>
</tr>
<tr>
<td>6.15.2</td>
<td>Courses</td>
<td>531</td>
</tr>
<tr>
<td>6.16</td>
<td>Linguistics</td>
<td>532</td>
</tr>
<tr>
<td>6.16.1</td>
<td>Master of Arts</td>
<td>532</td>
</tr>
<tr>
<td>6.16.2</td>
<td>Courses</td>
<td>532</td>
</tr>
<tr>
<td>6.17</td>
<td>Philosophy</td>
<td>532</td>
</tr>
<tr>
<td>6.17.1</td>
<td>Courses</td>
<td>533</td>
</tr>
<tr>
<td>6.18</td>
<td>Political Science</td>
<td>533</td>
</tr>
<tr>
<td>6.18.1</td>
<td>Courses</td>
<td>533</td>
</tr>
<tr>
<td>6.19</td>
<td>Religious Studies</td>
<td>534</td>
</tr>
<tr>
<td>6.19.1</td>
<td>Program of Study</td>
<td>534</td>
</tr>
<tr>
<td>6.19.2</td>
<td>Courses</td>
<td>534</td>
</tr>
<tr>
<td>6.20</td>
<td>Sociology</td>
<td>535</td>
</tr>
<tr>
<td>6.20.1</td>
<td>Master of Arts</td>
<td>535</td>
</tr>
</tbody>
</table>

7 Regulations Governing the Degree of Master of Arts and Education (Education and Francophone Literatures and Cultures) | 535 |
| 7.1 | Qualifications for Admission | 535 |
| 7.2 | Program of Study | 536 |
| 7.3 | Evaluation | 536 |
| 7.4 | Courses | 536 |

8 Regulations Governing the Degree of Master of Business Administration | 537 |
| 8.1 | Qualifications for Admission | 537 |
| 8.2 | Deadlines for Applications | 537 |
| 8.3 | Procedure for Admission | 538 |
| 8.4 | Direct Entry and Advanced Standing | 538 |
| 8.5 | Programs of Study | 539 |
| 8.6 | Evaluation | 539 |
| 8.7 | Courses | 540 |

9 Regulations Governing the Degree of Master of Business Administration (Executive Option in Petroleum) | 541 |
| 9.1 | Qualifications for Admission | 541 |
| 9.2 | Deadlines for Application Submissions | 542 |
| 9.3 | Procedure for Admission | 542 |
| 9.4 | Programs of Study | 542 |
| 9.5 | Evaluation | 542 |

10 Regulations Governing the Degree of Master of Education | 543 |
| 10.1 | Qualifications for Admission | 543 |
| 10.2 | Program of Study | 543 |
| 10.3 | Period of Study | 544 |
| 10.4 | Evaluation | 544 |
| 10.5 | Thesis | 544 |
| 10.6 | Program Regulations | 544 |
| 10.7 | Appeals and Waivers Procedures | 544 |
| 10.8 | Specific Programs | 544 |
| 10.8.1 | Educational Leadership Studies | 544 |
| 10.8.2 | Curriculum, Teaching and Learning Studies | 545 |
| 10.8.3 | Counselling Psychology | 546 |
| 10.8.4 | Post-Secondary Studies | 547 |
| 10.8.5 | Information Technology | 548 |
| 10.9 | Courses | 549 |

11 Regulations Governing the Degree of Master of Employment Relations | 551 |
| 11.1 | Administration | 551 |
| 11.2 | Qualifications for Admission | 551 |
| 11.3 | Deadlines for Applications | 551 |
| 11.4 | Procedure for Admission | 551 |
12 Regulations Governing the Degree of Master of Engineering Management

12.1 Qualifications for Admission ........................................................................ 553
12.2 Program of Study and Research .................................................................. 553
12.3 Supervision .................................................................................................. 553
12.4 Industrial Internship Option ........................................................................ 554
12.5 Fast-Track Option ....................................................................................... 554
12.6 Course Evaluation ........................................................................................ 554
12.7 Thesis ........................................................................................................... 554
12.8 Evaluation of Theses .................................................................................... 554
12.9 Recommendation for Awarding Degree ....................................................... 554
12.10 Master of Applied Science Programs .......................................................... 555
12.10.1 Computer Engineering ........................................................................... 555
12.10.2 Environmental Systems Engineering and Management ....................... 555
12.10.3 Oil and Gas Engineering ....................................................................... 555
12.11 Master of Engineering Management ........................................................... 555
12.11.1 Engineering Management ..................................................................... 555
12.12 Courses ...................................................................................................... 555

13 Regulations Governing the Degree of Master of Engineering Management

13.1 Program of Study ........................................................................................ 556
13.2 Qualifications for Admission ....................................................................... 556
13.3 Degree Requirements ................................................................................... 557
13.4 Courses ........................................................................................................ 557
13.5 Industrial Internship Option ........................................................................ 557

14 Regulations Governing the Degree of Master of Environmental Science

14.1 Program of Study ........................................................................................ 557
14.2 Qualifications for Admission ....................................................................... 557
14.3 Degree Requirements ................................................................................... 558
14.3.1 Master of Environmental Science ........................................................... 558
14.3.2 Master of Science (Environmental Science) ......................................... 558
14.4 Courses ........................................................................................................ 558

15 Regulations Governing the Degree of Master of Marine Studies (Fisheries Resource Management)

15.1 Administration ............................................................................................ 559
15.2 Programs ...................................................................................................... 559
15.3 Graduate Diploma ....................................................................................... 559
15.4 Master of Marine Studies ............................................................................ 559
15.5 Courses ........................................................................................................ 559

16 Regulations Governing the Degree of Master of Music

16.1 Qualifications for Admission ....................................................................... 560
16.2 Program of Study ......................................................................................... 560
16.3 Evaluation .................................................................................................... 560
16.4 Courses ........................................................................................................ 561

17 Regulations Governing the Degree of Master of Nursing

17.1 Program ........................................................................................................ 561
17.2 Qualifications for Admission ....................................................................... 561
17.3 Registration ................................................................................................. 562
17.4 Programs of Study ........................................................................................ 562
17.4.1 Thesis Option .......................................................................................... 562
17.4.2 Non-Thesis Option .................................................................................. 562
17.4.3 Nurse Practitioner Option ...................................................................... 563
17.5 Evaluation .................................................................................................... 563
17.6 Thesis ........................................................................................................... 563

18 Regulations Governing the Degree of Master of Philosophy

18.1 Qualifications for Admission ....................................................................... 563
18.2 Program of Study ........................................................................................ 563
18.3 Period of Study ............................................................................................. 564
18.4 Evaluation .................................................................................................... 564
18.5 Evaluation - General Comprehensive Examination ..................................... 564
18.6 Departmental Regulations .......................................................................... 564
18.7 German ........................................................................................................ 565
18.7.1 Courses .................................................................................................. 565
18.8 Humanities .................................................................................................. 566
18.8.1 Qualifications for Admission ................................................................ 566
18.8.2 Administration ....................................................................................... 566
18.8.3 Program of Study ................................................................................... 566
18.8.4 Comprehensive Examination ............................................................... 566
18.8.5 Courses .................................................................................................. 566
18.9 Sociology ..................................................................................................... 567
18.9.1 Courses .................................................................................................. 567

19 Regulations Governing the Degree of Master of Physical Education

19.1 Qualifications for Admission ....................................................................... 567
19.2 Program of Study and Research .................................................................. 567
20 Regulations Governing the Degree of Master of Public Health

21 Regulations Governing the Degree of Master of Science

22 Regulations Governing the Degree of Master of Science in Kinesiology

23 Regulations Governing the Degree of Master of Science in Medicine

24 Regulations Governing the Degree of Master of Science in Pharmacy
25 Regulations Governing the Degree of Master of Social Work
25.1 Qualifications for Admission ................................................. 591
25.2 Procedure for Admission .................................................... 591
25.3 Plan of Study .................................................................... 592
25.4 Field Internship SCWK 6912 (SCWK 6917 Beginning Fall 2011) .... 592
25.5 Course Format ................................................................... 592
25.6 Period of Study .................................................................. 593
25.7 Evaluation ......................................................................... 593
25.8 Courses ............................................................................. 593

26 Regulations Governing the Degree of Master of Technology Management
26.1 Administration .................................................................. 594
26.2 Program ............................................................................ 594
26.2.1 Admission Requirements ............................................... 594
26.2.2 Program of Study ........................................................... 594
26.2.3 Evaluation ................................................................... 595

27 Regulations Governing the Degree of Master of Women's Studies
27.1 Master of Women's Studies Degree ........................................ 595
27.2 Qualifications for Admission ............................................... 596
27.3 Program of Study ............................................................... 596
27.4 Thesis .............................................................................. 596
27.5 Project ............................................................................. 596
27.6 Internship ......................................................................... 596
27.7 Courses ............................................................................ 597

28 Regulations Governing the Degree of Doctor of Philosophy
28.1 Anthropology .................................................................... 597
28.1.1 Program ....................................................................... 597
28.1.2 Courses ....................................................................... 597
28.2 Archaeology ..................................................................... 598
28.2.1 Program ....................................................................... 598
28.2.2 Courses ....................................................................... 598
28.3 Biochemistry ..................................................................... 599
28.3.1 Program ....................................................................... 599
28.3.2 Courses ....................................................................... 599
28.4 Biology ............................................................................ 600
28.4.1 Biology ........................................................................ 600
28.4.2 Marine Biology ............................................................... 600
28.4.3 Courses ....................................................................... 601
28.5 Chemistry ........................................................................ 601
28.5.1 Program ....................................................................... 601
28.5.2 Courses ....................................................................... 602
28.6 Cognitive and Behavioural Ecology ....................................... 602
28.6.1 Program ....................................................................... 602
28.6.2 Regulations .................................................................. 603
28.6.3 Courses ....................................................................... 603
28.7 Computer Science .............................................................. 603
28.7.1 Doctor of Philosophy ....................................................... 603
28.7.2 Courses ....................................................................... 603
28.8 Earth Sciences ................................................................. 604
28.8.1 Doctor of Philosophy ....................................................... 604
28.8.2 Courses ....................................................................... 604
28.9 Education ........................................................................ 605
28.9.1 Admission to the Ph.D. Program ...................................... 605
28.9.2 Supervisory Committee .................................................. 605
28.9.3 Components of Study ..................................................... 605
28.9.4 Courses ....................................................................... 606
28.10 Engineering and Applied Science ........................................ 606
28.10.1 Qualifications for Admission .......................................... 606
28.10.2 Program of Study and Research ..................................... 606
28.10.3 Regulations for Ph.D. Comprehensive Examination ........ 606
28.10.4 Courses ..................................................................... 607
28.11 English Language and Literature ........................................ 607
28.11.1 Doctor of Philosophy ...................................................... 607
28.11.2 Courses ...................................................................... 608
28.12 Environmental Science ..................................................... 609
28.12.1 Program ...................................................................... 609
28.12.2 Doctor of Philosophy ..................................................... 609
28.12.3 Courses ...................................................................... 609
28.13 Ethnomusicology ............................................................... 609
28.13.1 Qualifications for Admission .......................................... 609
28.13.2 Program Requirements .................................................. 610
28.13.3 Courses ..................................................................... 610
28.14 Folklore ........................................................................... 611
28.14.1 Doctor of Philosophy ...................................................... 611
28.14.2 Courses ...................................................................... 612
28.15 Food Science .................................................................... 613
28.16 Geography ....................................................................... 613
28.16.1 Doctor of Philosophy ...................................................... 613
28.16.2 Courses ...................................................................... 613
28.17 Geology ........................................................................... 613
28.18 Geophysics ..................................................................... 614
28.19 History .................................................. 614
28.19.1 Doctor of Philosophy .............................. 614
28.19.2 Courses .............................................. 614
28.20 Interdisciplinary ................................. 614
28.20.1 Administration .................................. 614
28.20.2 Deadlines for Applications .................... 615
28.20.3 Admission ........................................ 615
28.20.4 Program of Study .......................... 615
28.21 Linguistics ........................................ 616
28.21.1 Doctor of Philosophy .......................... 616
28.21.2 Courses ......................................... 616
28.22 M.D.-Ph.D. ......................................... 617
28.22.1 Qualifications for Admission ................ 617
28.22.2 Program of Study and Research ............. 617
28.22.3 Evaluation ....................................... 617
28.22.4 Courses ....................................... 617
28.23 Management ...................................... 617
28.23.1 Admission to the Ph.D. Program ............ 617
28.23.2 Supervisory Committee ...................... 617
28.23.3 Components of Study ....................... 618
28.24 Mathematics and Statistics ................... 619
28.24.1 Doctor of Philosophy ........................ 619
28.24.2 Specific Regulations for the Ph.D. in Mathematics 620
28.24.3 Specific Regulations for the Ph.D. in Statistics 620
28.24.4 Specific Regulations for the Ph.D. in Theoretical Physics 621
28.25 Medicine ......................................... 621
28.26 Pharmacy ......................................... 622
28.26.1 Doctor of Philosophy ......................... 622
28.27 Physics and Physical Oceanography .......... 623
28.27.1 Doctor of Philosophy ........................ 623
28.27.2 Courses ....................................... 623
28.28 Psychology ........................................ 624
28.28.1 Doctor of Philosophy ........................ 624
28.28.2 Courses ....................................... 625
28.29 Social Work ....................................... 625
28.29.1 Doctor of Philosophy ......................... 625
28.29.2 Courses ....................................... 626
28.30 Sociology .......................................... 626
28.30.1 Doctor of Philosophy ......................... 626
28.30.2 Courses ....................................... 627
28.31 Theoretical Physics .............................. 627
28.31.1 Program ....................................... 627
28.31.2 Regulations ................................. 627

29 Regulations Governing the Degree of Doctor of Psychology ................................... 628
29.1 Administration ..................................... 628
29.2 Admission Criteria ................................. 628
29.3 Program of Study ................................ 628
29.3.1 Comprehensive Examination .............. 628
29.3.2 Thesis ......................................... 628
29.3.3 Predoctoral Internship ...................... 628
29.4 Courses ........................................... 629

List of Tables

Table I - M.A.Sc. in Computer Engineering Program .................................................. 515
Table I - Master of Business Administration Schedule of Required Courses ............... 540
Table II - Master of Business Administration Schedule of Required Courses - Direct Entry 540
Table III - Master of Business Administration Schedule of M.B.A. Electives ............... 540
Table IV - Master of Business Administration Course Restrictions .......................... 540
Table V - Master of Business Administration Prerequisite/Co-requisite .......................... 541
Table I - Master of Business Administration (Executive Option in Petroleum) Program of Study 542
Table I - Master of Employment Relations Schedule of Courses .................................. 552
Table II - Master of Employment Relations Core Courses ......................................... 552
Table III - Master of Employment Relations Elective Courses ................................. 553
Table I - Master of Public Health Recommended Course Sequence for Full-Time Students 569
Table of Credit Restrictions - Master of Science in Cognitive and Behavioral Ecology 575
Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses 581
Table of Credit Restrictions - Physics and Physical Oceanography .............................. 583
Table of Credit Restrictions - Doctor of Philosophy in Cognitive and Behavioral Ecology 603
Recommended Sequence for Operations and Information Management (OIM) Specialization Table 618
Recommended Sequence for Organizational Behaviour and Human Resources Management Specialization Table 618
Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses 620
Table of Credit Restrictions - Physics and Physical Oceanography .............................. 624
Table I - Doctor of Psychology (Psy.D.) Degree Program ........................................... 629
The Memoral University of Newfoundland Code

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

General Information and Regulations Governing All Graduate Students

The graduate degrees of Doctor of Philosophy, Doctor of Psychology, Master of Applied Social Psychology (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 Engineering, Master of Engineering Management, Master of Music, Master of Nursing, Master of Philosophy, Master of Physical Education, Master of Science, Master of Science in Kinesiology, Master of Science in Medicine, Master of Science in Pharmacy, Master of Social Work, and Master of Technology Management are awarded by the University. Graduate diplomas are offered in Clinical Epidemiology, Community Health and Humanities, Fisheries Resource Management, Post-Secondary Studies (Health Professional Education) and Post Masters Nurse Practitioner.

Interdisciplinary study is encouraged by the University, and prospective applicants should make enquiries about their interests from all the areas of study concerned. Interdisciplinary programs offered are: Master of Applied Science (Computer Engineering, Environmental Systems Engineering and Management, and Oil and Gas Engineering), Master of Arts and Education (Education and Francophone Literature and Culture), Master of Arts and Doctor of Philosophy in Ethnomusicology, Master of Employment Relations, Master of Engineering Management, Master of Environmental Science, Master of Marine Studies, Master of Science (Aquaculture), Master of Science and Doctor of Philosophy (Cognitive and Behavioural Ecology), Master of Science (Computational Science), Master of Science (Computational Science - Co-operative), Master of Science and Doctor of Philosophy (Environmental Science), Master of Philosophy (Humanities), Master of Technology Management, Doctor of Philosophy (Interdisciplinary), Doctor of Philosophy (Theoretical Physics), and Master of Women's Studies.

Additional information regarding the School of Graduate Studies is available at www.mun.ca/sgs/.

Note: Every candidate in graduate studies shall comply with the General Regulations, the Degree Regulations and any additional requirements of the appropriate Department.

Definition and Explanation of Terms Used in this Calendar

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.)

Dean of Graduate Studies

In all regulations following, reference to “the Dean” refers specifically to the Dean of Graduate Studies.

Credit Hour

A credit hour is the measure used to reflect the relative weight of a given course towards the fulfillment 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.

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 fulfillment 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.

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; and 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 second-year of admission 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.

2.1.6 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.

2.1.7 Academic Year
The academic year is from September 1 of one year to August 31 of the following year.

2.1.8 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 his or her 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.

2.1.9 Visiting Research 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 research student. In order to obtain access to University resources, and where applicable, a study permit, 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 research student must submit an Application for Admission 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 research students will be exempt from tuition fees. However, all visiting research 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 research student wishes to register for a course while at Memorial University of Newfoundland, s/he must meet the University admission requirements and pay the undergraduate per course fee as indicated under the UNIVERSITY REGULATIONS - Fees and Charges in the University Calendar.

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 his/her home institution is not considered to be a visiting research 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 under the UNIVERSITY REGULATIONS - Fees and Charges in the University Calendar.

2.1.10 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.

2.2 General Regulations

2.2.1 Qualifications for Admission

2.2.1.1 Graduate Diploma Programs
To be considered for admission to a Graduate Diploma program, the minimum requirements will normally be a second-class degree from a university of recognized standing, in an appropriate area of study.

A candidate admitted to a Graduate Diploma program, who has demonstrated to the satisfaction of the Faculty/School/Department concerned their ability to pursue research at the master's level, may be permitted subsequently to transfer his/her 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 his/her candidature.

2.2.1.2 Master's Programs
To be considered for admission to a Master's program, the minimum requirements will normally be a second-class degree from a university of recognized standing, in an appropriate area of study.

2.2.1.3 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 under UNIVERSITY REGULATIONS - Fees and Charges in the University Calendar; or
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.

2.2.1.4 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 in 1. or 2. above.

2.2.1.5 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 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 Language and/or Literature 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.

7. Submission of official results of the Carleton 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.

8. 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.

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 1-8 above.

2.2.1.6 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., and 8. above. Any such additional requirements are detailed in the appropriate section of the Calendar.

2.2.1.7 English Language Requirements Subsequent to Admission

1. Students who have been admitted under English Proficiency Requirements, Clauses 4. - 8. 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 Language and Literature, 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.


2.2.1.8 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.

2.2.2 Procedure for Admission

1. Application for admission to graduate studies must be made either online or on the appropriate form in duplicate to the School of Graduate Studies. 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 candidate 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.

2.2.3 Registration

2.2.3.1 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.

2.2.3.2 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 (see Fees and Charges).

2.2.3.3 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.

2.2.3.4 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 his or her registration for that semester.

2. Within seven 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 his or her 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.

2.2.3.5 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.

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.

c. 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.

2.2.3.6 Leaves of Absence

1. General

a. 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).

b. In the event that circumstances prevent a student from pursuing his/her program, the student may apply to the Dean of Graduate Studies for a leave of absence.

c. A student may normally apply for only one leave of absence during his/her program. The maximum leave of absence shall normally not exceed 12 months.

d. 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 (see Fees and Charges).

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
2.2.4 Program Requirements

Note: Every candidate 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.

2.2.4.1 Graduate Diploma and Master’s Programs

1. Candidates should consult the appropriate Degree and Department/Faculty/School regulations for information concerning the specific program requirements.
2. Graduate diploma programs shall not normally comprise more than 50% of the master's in the same area.

2.2.4.2 Ph.D. and Psy.D. Programs

1. Each candidate is required to pass a comprehensive examination (see Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination).
2. Each candidate shall present a thesis embodying the results of original research.
3. Candidates should consult the appropriate Department/Faculty/School regulations for information concerning the number and specific credit hours that may be required for a program.
4. Candidates 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.

2.2.4.3 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.

2.2.4.4 Changes in Programs

Any changes in the candidate's program of studies must be approved by the Dean of Graduate Studies on the recommendation of the appropriate academic unit.

2.2.4.5 Research Involving Animals

The Animal Care Unit offers a seminar in animal care at least once annually. The seminar is administered by the School of Graduate Studies. All graduate students whose degree requirements involve experimentation on living vertebrate animals are required to attend this seminar normally at the first offering following commencement of their program.

2.2.4.6 Graduate Research Integrity Requirement

All graduate students are required to complete the Graduate Research Integrity Program (GRIP), which is administered by the School of Graduate Studies. All graduate students whose degree requirements involve experimentation on living vertebrate animals are required to attend this seminar normally at the first offering following commencement of their program.

2.2.4.7 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 his/her 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.

2.2.4.8 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.

Affiliated Master's programs for graduate diploma programs currently offered by the School of Graduate Studies are as follows:

**Medicine**
- Graduate Diploma in Clinical Epidemiology - Master of Science in Medicine (Clinical Epidemiology)
- Graduate Diploma in Community Health - Master of Science in Medicine (Community Health) and Master of Public Health
2.2.5 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.

2.2.6 Appeal of Regulations

2.2.6.1 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, students are 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 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 Appeal Procedures for information concerning where appeals should be directed.
6. The principle of fairness should be applied to all parties in appeals processes and decisions. Fairness includes, but is 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 be heard, all parties to the appeal being made aware of the evidence considered by the committee, and no individual sitting in judgment on an appeal at a higher level who has already been a party to the decision at a lower level. Any member of a committee hearing an appeal, who was previously involved in a decision making process at a lower level of process, will abstain from voting.
7. While the University makes provision for students to appeal regulations, the academic, financial or other consequences of the appeal process rests with the students.
8. When an appeal is denied, the student will be advised in writing of the reasons for the decision and of further steps that can be taken in the appeals process. A student whose appeal is denied by the Executive Committee of Senate may appeal to the Senate. Appeals to the Senate will be heard in the first instance by the Senate Committee on Academic Appeals and that Committee will investigate the appeal and file a report to the Senate with its findings and recommendations as expeditiously as possible. Students have the right to appear in person before the Senate Committee on Academic Appeals, and have the right to be accompanied by another person in order to assist them with their presentation. Normally, however, the presentation of the student’s case rests with the student. Advance notice of the student’s intention to appear and the identity of the accompanying individual, if any, must be provided to the Secretary of the Senate Committee on Academic Appeals. Should the student’s appeal be denied by the Senate, the student will be advised that within the University no further appeal is possible.
9. Student appeals are heard anonymously. However, this provision ceases to apply to a student who elects to appear in person before the Senate Committee on Academic Appeals as outlined in Clause 8 above.

2.2.6.2 Appeal Procedures

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. Permission will not be unnecessarily withheld.
3. Any student whose request for waiver of regulations has been denied has the right to appeal. Normally, any such appeal should be made in writing, clearly stating the basis for the appeal, and should be directed as follows:
   - 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 Executive Committee of Senate, c/o Office of the Registrar.
4. Appeals cannot be made on the basis of the grades awarded in individual courses. Dissatisfaction with grades is not sufficient grounds for an appeal.

Notwithstanding the above, and recognizing that the award of grades is an academic manner within the purview of experts in a
discipline or subject area, students who wish to question the award of grades in individual courses are encouraged to consult with the following in the order given:

- The course instructor
- The head of the appropriate academic unit
- The Dean of Graduate Studies

2.2.6.3 Information Required in Letters of Appeal

1. All 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, telephone number, Memorial University of Newfoundland email address, student ID number, the decision being appealed and the remedy being sought. The grounds for the appeal, including health issues, bereavement and/or other acceptable cause, must be stated in the Letter of Appeal. Students 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.

3. In cases where an appeal is made on health issues, the student must provide a certificate from a health professional in the form of a note or a letter. Such a note must be sufficiently specific to allow appropriate consideration of the student’s case. The note 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.

4. Students claiming bereavement as grounds must provide proof of death and evidence of a close personal relationship between themselves and the deceased.

5. 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 the students’ rights to confidentiality. With this in mind, a student may discuss the reasons for his or her appeal with a University, College or Institute counsellor, who, with the student’s permission and provided sufficient reasons exist, may then write a letter to the appropriate committee confirming that there were sufficient grounds for an appeal, without disclosing the special personal and confidential details of the case.

2.2.6.4 Information Required for Certificates from Health Professionals

1. Students who request 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 are 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 notes must be sufficiently specific to allow a proper consideration of students’ cases. The University requires that all such notes 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. Confidentiality: The University respects the confidentiality of all material contained in notes. Student should request that their health professional retain a copy of the note in case the note needs to be verified or reissued at a later date.

2.2.7 Evaluation

Note: For interdisciplinary programs, the Head of the academic unit is the Dean or Director of the Faculty/School administering the program.

2.2.7.1 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% | 1
F | below 50% | 0

PW (pass with distinction) - indicates excellent performance | no numeric grade | not applicable
PS (pass) - indicates performance meets expectations | no numeric grade | not applicable
F (fail) - indicates failing performance | no numeric grade | not applicable
D (drop) - drop without academic prejudice | no numeric grade | not applicable
DF (drop fail) - drop with academic prejudice | 0% | 0
AB (absent) - absent for acceptable cause | no numeric grade | not applicable
INC (incomplete) - incomplete pending final grade | no numeric grade | not applicable

4. Supplementary examinations are not permitted.

### 2.2.2 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 candidate be required to withdraw from the program, if after consultation with the candidate, the candidate'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 candidate'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 candidate by the Dean.

### 2.2.7.3 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.

### 2.2.7.4 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 'F'.

2. Clause 1. notwithstanding, for acceptable cause an extension of time not exceeding the end of the semester following 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.**
2.2.7.5 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 a fee of $50.00 per paper within one month of the release by the University of the grade reports. If the mark is raised after re-reading, the fee is refunded. If the mark is unchanged or lowered, the fee is forfeited.

2.2.8 Comprehensive Examinations

2.2.8.1 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, shall be voting members.
2. In this examination the candidates 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 be completed.
3. 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 candidates who demonstrate superior knowledge of their chosen field. This category requires unanimous support of the Comprehensive Examination Committee.
   b. The category of 'pass' will be awarded to candidates who demonstrate an acceptable knowledge of their chosen area and requires a simple majority vote.
   c. The category of 're-examination' selects those candidates 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 candidate'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. The candidate's program is terminated. A simple majority vote will default to the award of 're-examination'.
4. 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 candidate by the Dean.

2.2.8.2 Ph.D. and Psy.D. Comprehensive Examination

1. The candidate shall submit to a comprehensive examination, which may be written or oral or both as determined by the academic unit. Candidates 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 candidate'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 candidate's Supervisor [or, where a Supervisor has not yet been appointed, the Graduate Officer or Chair of the Graduate Studies (or equivalent) Committee], the Dean of Graduate Studies (or delegate), and at least three other members, the total voting members to be an odd number. All members of the Committee including the Chairperson, but excluding the Dean of Graduate Studies, shall be voting members.
3. In this examination, the candidate must demonstrate a mastery of those sub-disciplines appropriate to his/her research area, as defined by the academic unit in which they are students. Those sub-disciplines upon which the candidate will be examined should be made known to the candidate no later than three months prior to the examination. The candidate must further be able to relate the specialization of his/her research to the larger context of these sub-disciplines.
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 candidates who demonstrate superior knowledge of their chosen field. This category requires unanimous support of the Comprehensive Examination Committee.
   b. The category of 'pass' will be awarded to candidates who demonstrate an acceptable knowledge of their chosen area and requires a simple majority vote.
   c. The category of 're-examination' selects those candidates 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 candidate'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. The candidate'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 candidate by the Dean.

2.2.9 Supervision

2.2.9.1 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.

2.2.9.2 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, \textit{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.
   
g. to recommend to the Dean suitable persons to act as members of the Thesis Examining Board.

2.2.9.3 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 \textit{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.

2.2.10 Theses and Reports

2.2.10.1 Thesis/Report Guide Supplement

The Thesis/Report Guide Supplement (www.mun.ca/sgs/go/guid_policies/guidelines_intro.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.

2.2.10.2 Submission

1. Candidates must submit the thesis/report at least four months before the University Convocation at which the award of the Degree is expected (see \textit{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 candidate 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.

2.2.10.3 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 candidate 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.

2.2.10.4 Evaluation of Ph.D. and Psy.D. Theses

Candidates 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 candidate 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 candidate will be assessed by a Thesis Examining Board. Its first responsibility is to determine whether the thesis successfully demonstrates the candidate'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 candidate 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 candidate and to then recommend to the Dean of Graduate Studies whether the candidate 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 candidate'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 candidate should be permitted to proceed to an oral examination and defence of the work. An examiner may recommend:
   i. that the candidate be allowed to proceed to the oral defence of the thesis*, or;
   ii. that the candidate not be allowed to proceed to the oral defence at this time**; or
   iii. that the candidate 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 candidate, 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. No candidate will be permitted to re-submit a thesis more than once. If the Dean decides that the thesis must be revised before it can be orally defended (as specified in 3.a.i.) the resubmitted thesis will be examined by a Board which may differ in whole or in part from the original. In the case of a re-submitted thesis an examiner may recommend only:
   i. that the candidate be allowed to proceed to the oral defence of the thesis; or
   ii. that the candidate should be failed.

c. 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.

d. 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 his/her delegate. The presence of all members of the Examining Board is normally required.

e. Following the defence, the Board will meet in camera to render a final assessment of the thesis and the candidate's ability to defend his/her work. The Board may recommend one of the following outcomes:
   i. Passed with distinction (Awarded to candidates who demonstrate superior knowledge of their chosen field; 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 candidate 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.

f. If the members of the Board are unanimous in their recommendation, the Chair of the Examination may accept this recommendation and inform the candidate 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.

g. No candidate shall be permitted more than two Oral Examinations.

2.2.10.5 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.

2.2.10.6 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.

2.2.11 Graduation Procedure
Candidates expecting to graduate at any particular Convocation must apply online to the Office of the Registrar at www.mun.ca/regoff/ 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.

2.2.12 Academic Behaviour

2.2.12.1 Principles
In the course of a graduate degree program students are expected to learn those principles which constitute proper academic behaviour. 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 misbehaviour cannot be condoned or even appear to be condoned. Students have the responsibility to ascertain those actions which could be construed as dishonest or improper. Certain flagrant violations are listed below under Academic Dishonesty. Students are reminded that for guidance on proper scholarly behaviour they should seek assistance from their instructors and supervisors. The Graduate Students’ Union will provide students with information on their legal rights and the information that advice about acceptable writing standards is available through the Writing Centre.

2.2.12.2 Academic Dishonesty: Offences

Note: 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: Cheating on examinations, theses, assignments, work term reports, projects, internship reports, or any other tests.
   Cheating 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 examinations, theses, assignments, work term reports, projects, 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.

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 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.

4. Theft of examination papers or other material: By theft is meant obtaining by an 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 which has been or is being submitted to another course 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.

2.2.12.3 General Procedure

1. When a member of the University community has grounds for belief that an academic offence has been committed, that person will report the matter without delay to the Head of the Department or the appropriate academic officer (i.e., Dean or Director) of the unit in which the offence occurred. In the case of non-academic units, such as the Office of the Registrar, Library and Computing Services, the matter shall be referred through the University Officer in charge of that unit. The student should be informed of the suspicion as soon as possible in an effort to avoid further improper behaviour. There should then be an immediate direct attempt to resolve minor offences between the instructor or Supervisor and the student(s) concerned at the Departmental level. Only if resolution proves impossible, or one party is dissatisfied with the resolution, should the Department Head or other appropriate academic officer become further involved.

2. If, in the judgment of the Department Head or other appropriate academic officer (in consultation with the Dean of Faculty) the alleged offence against University regulations is such as to warrant resolution through the School of Graduate Studies, the Department Head or other appropriate academic officer will refer the matter to the Dean of Graduate Studies, and procedures for resolution by the School of Graduate Studies will be implemented.

3. If, in the judgment of the Department Head or other appropriate academic officer, the offence warrants resolution through Departmental procedures, the individuals involved will be advised to attempt to resolve the matter without proceeding to a formal hearing. In the event that no resolution is possible between the individual parties, the Department Head or other appropriate academic officer will institute proceedings through the School of Graduate Studies. In all cases, it is the responsibility of the Department Head or other appropriate academic officer to ensure that fairness and impartiality are achieved in the treatment of students.

4. The principle of anonymity shall apply. All written documents shall refer to the student by number and the faculty member by letter.
2.2.12.4 Procedure for Departmental Resolution

If, upon receiving a report of an alleged academic offence the Department Head or other appropriate academic officer, decide that an attempt should be made to resolve that matter within the Department the following procedures shall apply:

1. The Department Head or other appropriate academic officer shall request that the accuser and the accused meet with him (or her) and at the meeting the Department Head or other appropriate academic officer shall state the allegation, indicate the range of applicable penalties, and arrange a second meeting between the accuser and the accused only.

2. At the second meeting the parties (accuser and accused) shall endeavour to obtain a mutually satisfactory resolution of the matter.

3. The parties (accuser and accused) shall report jointly to the Department Head or other appropriate academic officer on the result of their second meeting.

4. If the report is of a resolution which the Department Head or other appropriate officer considers to be fair and equitable the matter shall be considered closed. If the Department Head or other appropriate academic officer considers the reported resolution to be unfair and/or inequitable he or she will endeavour to obtain an alternative satisfactory resolution directly with the parties.

5. Should all reasonable efforts to obtain a Departmental resolution fail, the Department Head or other appropriate academic officer will refer the case to the Dean of Graduate Studies and shall inform the accuser and the accused accordingly. From this stage onward procedures for resolution by the School of Graduate Studies will apply.

Notes: 1. The accused or accuser may request, during the procedures for an informal resolution, that the case be referred to the Dean of Graduate Studies and thereafter the procedures for resolution by the School of Graduate Studies will apply.

2. Procedures for Departmental Resolution will not be applied to cases involving alleged offences on final examinations.

3. If at any stage of the procedures for either Departmental or Graduate Studies resolution, the accused fails to appear or 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.

4. If at any stage of the procedures for either Departmental or Graduate Studies resolution, the accuser fails to appear at a scheduled hearing to defend an allegation, without reasonable cause, within two weeks of notification by the Department Head or other appropriate academic officer, the action will be dismissed.

2.2.12.5 Procedures for Resolution by the School of Graduate Studies

If the matter cannot be resolved following the Procedure for Departmental Resolution as outlined above, or if the allegation involves a major breach of University regulations, the following procedures shall apply:

1. If the Department Head or other appropriate academic officer (in consultation with the Dean of his faculty) is satisfied that the student has a serious case to answer, he or she shall inform the student in writing of the nature of the case against him or her. In addition, the Department Head or other appropriate academic officer shall report to the Dean of Graduate Studies who shall immediately appoint a disinterested Investigator from the membership of the Academic Council of Graduate Studies. 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.

3. 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 he or she wishes to be considered.

4. Upon receipt of all information from the Investigator as well as comments from the accuser and accused, the Dean of Graduate Studies shall strike an ad hoc committee to review the case and make recommendations to the Academic Council of the School of Graduate Studies. The Investigator may be asked to attend the meetings of the ad hoc committee to answer questions and provide information pertinent to the case, but shall be absent from the formal discussion and voting.

5. The Academic Council of the School of Graduate Studies shall take appropriate action in accordance with the section headed “Penalties”.

Notes: 1. If at any stage of the procedures for either Departmental or Graduate Studies resolution, the accused fails to appear or 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.

Action will proceed regardless of the current status of the student.

2. If at any stage of the procedures for either informal or formal resolution, the accuser fails to appear at a scheduled hearing to defend an allegation without reasonable cause, within two weeks of notification the action will be dismissed.

2.2.12.6 Penalties

The imposition of any of the penalties listed below does not preclude further action under the Criminal Code of Canada. A student who has been found guilty of an academic offence will be subject to a penalty or penalties commensurate with the offence. The range of penalties and their determination is given below. Enforcement of penalties resulting from Procedures for Resolution 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 resulting from Department resolution shall be limited to 1. and 2. Penalties shall be imposed on the basis of the student’s status at the time of the offence.

1. Reprimand: This shall be in the nature of a warning by the Department Head, or appropriate academic officer or an appropriate Committee to the student that his/her behaviour 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, and will be decided by the Academic Council of the School of Graduate Studies upon the recommendation of the Department concerned in the case of a resolution by the School of Graduate Studies, or by a Department Head, or appropriate academic officer in the case of a Departmental resolution. Since graduate students must obtain a B grade in required courses and a pass in additional courses a reduction of grade could lead to termination of program.

3. Probation: The period of probation will be determined by the Academic Council of the School of Graduate Studies. 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.

4. Suspension: Suspension will apply to a course, department, faculty, school, or the University. The period of suspension will be determined by the Academic Council of the School of Graduate Studies and shall not exceed three consecutive semesters, and shall be part of the allowable time for a graduate program.

5. Expulsion: The recommendation for expulsion from the University will be made by the Academic Council of the School of Graduate Studies to the President for his/her final decision. Prior to the President’s decision, the Secretary of the Academic Council 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 to the Executive Committee of Senate.
6. **Revocation of Degree**: The recommendation will be made by the Academic Council of the School of Graduate Studies that the Senate rescind a degree that has been obtained by submission of fraudulent or plagiarized work.

7. **Rescinding of Admission and Degree Revocation**: The submission of false information (see **Academic Dishonesty Offences**) in support of an application for admission to Memorial University of Newfoundland is an Academic Dishonesty Offence. In the event that this offence is discovered after the granting of a degree, the Academic Council of the School of Graduate Studies may recommend to the Senate that the student's admission be rescinded and that the degree(s) granted to the student be revoked.

In the event that a student has been found guilty of an Academic Dishonesty Offence and when a penalty has been determined, a notation on the student's transcript may be made by the Registrar as provided for in **Transcript Entries** below.

### 2.2.12.7 Transcript Entries

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

<table>
<thead>
<tr>
<th>Penalty</th>
<th>Transcript Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reprimand</td>
<td>No transcript entry</td>
</tr>
<tr>
<td>Reduction of Grade</td>
<td>Entry of final grade for course</td>
</tr>
<tr>
<td>Probation</td>
<td><em>On probation at the University for academic misconduct until Day, Month, Year</em></td>
</tr>
<tr>
<td>Suspension</td>
<td>&quot;Suspended from the School of Graduate Studies for academic misconduct until Day, Month, Year&quot;</td>
</tr>
<tr>
<td>Expulsion</td>
<td>*Expelled from the University for academic misconduct&quot;</td>
</tr>
<tr>
<td>Revocation of Degree</td>
<td><em>Degree revoked for Academic Dishonesty</em></td>
</tr>
</tbody>
</table>

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

### 2.2.12.8 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.

2. In the case of a resolution effected through the procedures for Departmental resolution, all documentation shall be retained in the office of the relevant Department Head or other appropriate academic officer.

3. In the case of a resolution effected through the procedures for resolution by the School of Graduate Studies all documentation shall be forwarded to the Office of the Registrar.

### 2.2.12.9 Right of Appeal

Appeals against decisions of the Academic Council of the School of Graduate Studies made under **Procedures for Resolution by the School of Graduate Studies** shall be directed to the Executive Committee of Senate.

*Notes:*
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 dishonesty will be forwarded to the last known mailing address of the student as noted on the files of the School of Graduate Studies. 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 have failed.

2. While 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 including retroactive effect on grades and promotion within a program, arising from an investigation and any negative decision rendered. 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 found not guilty.

### 2.2.13 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; or

   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 Regulation, 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 his/her studies under any of the above clauses, that student must be advised in writing of the nature of the case against him/her and must be advised of the right to appeal before the penalty imposed takes effect.

2. Appeals against actions taken under Clause 2. should be directed to the Senate of the University. Any such appeal should be made in writing clearly stating the basis for the appeal and should be directed to the Secretary of Senate, c/o the Office of the Registrar.

3. Appeals against actions taken under Clause 3. should be directed to the Appeals Committee, School of Graduate Studies.

### 2.2.14 Provision for Reaplication

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. e., 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.

2.2.15 Graduate Diplomas
1. Clinical Epidemiology - See Master of Science in Medicine
2. Community Health and Humanities - See Master of Science in Medicine
3. Fisheries Resource Management - See Master of Marine Studies
4. Health Professional Education - See Master of Education (Post-Secondary Studies)
5. Post Masters Nurse Practitioner - See Master of Nursing

3 Regulations Governing the Degree of Master of Applied Science
The Degree of Master of Applied Science (M.A.Sc.) is a course-based Degree offered in four areas: Computer Engineering, Environmental Systems Engineering and Management, and Oil and Gas Engineering. For information on the research-focused Master of Engineering program, refer to the regulations governing the Degree of Master of Engineering.

3.1 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.
Successful completion of an internship will be indicated by a descriptive notation on the student transcript.

3.2 Computer Engineering
3.2.1 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.

3.2.2 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.

3.2.3 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 6102, and others designated by the Board of Studies for
      the program.
2. Normally students will take courses as shown in Table I. Students wishing to take courses in another sequence must request
   approval from the Board of Studies for the program.
Table I - M.A.Sc. in Computer Engineering Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Preparation</th>
<th>Core</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Spring</td>
<td>English</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Year 1 Fall</td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Year 1 Winter</td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Year 2 Spring</td>
<td></td>
<td>ENGI 9801</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2.4 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. 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.

3.2.5 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 6102 Optics and Photonics

3.3 Environmental Systems Engineering and Management

3.3.1 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.

3.3.2 Qualifications for Admission

1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a Bachelor's Degree in engineering preferably in civil/environment/chemical/processing/petroleum engineering or equivalent from a recognized university with an aggregate mark of 75% or above.
3. To be eligible for consideration for admission, applicants will meet the English Proficiency Requirements described under General Regulations Qualification for Admission.

3.3.3 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, ENVE/ENVS 6001, ENVE/ENVS 6002, ENVE/ENVS 6003, and Geography 6250

3.3.4 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.

3.3.5 Courses

- 960A Environmental Engineering Project (0 credit hours)
- 960B Environmental Engineering Project (6 credit hours)
- 9601 Environmental Pollution and Mitigation (cross-listed as ENVS 6004)
3.4 Oil and Gas Engineering

3.4.1 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.

3.4.2 Qualifications for Admission
1. Admission is limited and competitive.
2. To be considered for admission, applicants shall normally hold a Bachelor’s degree in engineering preferably in Mechanical, Chemical/Process, Civil, Environmental, Mining/Mineral, or Petroleum Engineering, or in a related engineering discipline from a recognized university with an average mark of 75% or above.
3. To be eligible for consideration for admission applicants will meet the English Proficiency Requirements described under General Regulations, English Proficiency Requirements.

3.4.3 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 9113, 9114, 9110, 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.

3.4.4 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

4 Regulations Governing the Degree of Master of Applied Social Psychology (Co-operative)

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.
4.1 Qualifications for Admission
1. Admission to the program is competitive and selective. To be considered for admission to the Master of Applied Social Psychology (Cooperative) 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.

4.2 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 candidate shall complete four Academic Terms in the Cooperative Program and shall normally be required to complete two Work Terms.
3. Courses shall be taken in Academic Terms of "blocks" in the sequence, order, and course load as follows:
   - Fall: 6000, 6400, Winter: 6001, 6401, Spring: Work term 1, Fall: 6402, 6403, Winter: Work term 2, Spring: 6404

4.3 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 candidate 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 the Co-operative Education Services Centre (CESC). 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 by the CESC 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 CESC shall be responsible for finding an alternative acceptable to the Head of Psychology and the CESC.

4.4 Courses
6000 Advanced Statistics in Psychology
6001 Research Design
601W Work Term 1
602W Work Term 2
6400 Theory and Methods in Social Psychology
6401 Social Cognition
6402 Group Processes
6403 Advanced Methods in Applied Social Psychological Research
6404 Project in Applied Social Psychology

5 Regulations Governing the Degree of Master of Applied Statistics
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.
5.1 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, both in achievement and depth of study, 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 3521, 3530, 4410, 4520, 4560, 4561, 4590, 4591. 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. Applicants who do not meet these requirements should consult the Department of Mathematics and Statistics about a program of further undergraduate courses. Such a program is intended to provide the candidate with an adequate statistical background. Such courses may not be used to fulfill the program course requirements of the Master of Applied Statistics Degree.

4. 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.

5.2 Program of Study

The minimum requirements for the Degree of Master of Applied Statistics are completion of the following:

1. Six credit hours from the following courses:
   - 6510 Mathematical Statistics
   - 6520 Linear Models
   - 6560 Continuous Multivariate Analysis
   - 6561 Categorical Data Analysis

2. 6590 A Course in Statistical Consulting

3. Nine additional credit hours selected from 6503-6589.

4. A practicum: An applied statistics project and an associated report. The report must demonstrate a satisfactory general mastery of statistical knowledge.

5.3 Evaluation

1. In order to continue in graduate studies and in order to qualify for a Master's Degree, a candidate shall obtain an A or B for program courses and complete successfully the practicum requirement.

2. Statistics 6590 will be evaluated by the course co-ordinator in consultation with associated statistical consultants.

3. Evaluation of the practicum shall be carried out in accordance with Theses and Reports of the General Regulations governing all students in the School of Graduate Studies.

Note: Every candidate in graduate studies shall comply with the General Regulations, the Degree Regulations and any additional requirements of the Department of Mathematics and Statistics.

5.4 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

Statistics
- 6503 Stochastic Processes
- 6505 Survival Analysis
- 6510 Mathematical Statistics
- 6520 Linear Models
- 6530 Generalized Linear Longitudinal Mixed Models
- 6540 Time Series Analysis
- 6545 Statistical Computing
- 6550 Nonparametric Statistics
- 6560 Multivariate Analysis
- 6561 Categorical Data Analysis
- 6570-6589 Selected Topics in Statistics and Probability
- 6590 A Course in Statistical Consulting
- 6930 Statistics Seminar

6 Regulations Governing the Degree of Master of Arts

Professor and Dean of Arts
R. Tremblay

Associate Professor and Acting Associate Dean (Graduate and Research)
L. Rankin

The Degree of Master of Arts (M.A.) is offered in Anthropology, Archaeology, Classics, Economics, English Language and Literature, 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.

6.1 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.)

6.2 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 candidate 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. Candidates 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 candidate 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.

6.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master’s Degree, a candidate shall obtain an A or B grade in each regulation course. Some candidates 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 candidate, the instructors in graduate courses, and the thesis Supervisor, the Head of a Department has determined that the candidate’s work has fallen below a satisfactory level, the Head may recommend to the Dean that the candidate be required to withdraw from the program.

6.4 Thesis or Report

See General Regulation, Theses and Reports.

6.5 Anthropology

Associate Professor and Head of the Department

M. Tate

The Degree of Master of Arts (M.A.) is offered in Anthropology by either full-time or part-time study.

1. Candidates will specialize in social and cultural anthropology.

2. When candidates are accepted into the program, they will be assigned one or more Supervisors. Candidates’ programs shall be the responsibility of their Supervisor(s), the graduate co-ordinator(s), and the Head of the Department.

3. If candidates’ 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. Candidates may choose between a thesis and a non-thesis option.

6.5.1 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 (a) completing course work, (b) 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 (d) completing research, (e) presenting an oral research report to the Department, and (f) completing a thesis.

2. Candidates for the Degree of a Master of Arts 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.

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, candidates 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.

6.5.2 M.A. Without Thesis

Normally, the M.A. program without thesis should take one academic year to complete. Candidates 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 6440, ANTH 6890 and ANTH 6300. 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.

6.5.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow.

6010 Cultural Ecology
6071 Health and Illness: Cultural Contexts and Constructions
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 Social and Economic 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)
6580-6599 Special Areas in Anthropology
6600 Contemporary Debates in Anthropology
6890 Graduate Seminar

6.6 Archaeology

Professor and Head of the Department

S. Brown

The Degree of Master of Arts is offered in Archaeology by either full-time or part-time study.

1. Candidates 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 candidates are accepted into the program, they will be assigned one or more Supervisors. Candidates' programs shall be the responsibility of their Supervisor(s), the graduate co-ordinator, and the Head of the Department.

3. If candidates' records suggest a deficiency in some area(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 (a) completing course work, (b) writing and orally defending a thesis proposal before members of the faculty, and (c) beginning to carry out research. The following semesters will be spent in (d) completing research, (e) presenting an oral research report to the Department, and (f) completing a thesis.

5. Candidates 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, candidates 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.

6.6.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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
The Department of Classics offers an M.A. in Classics, with an emphasis on classical texts and research methods, which suitably prepared students may complete in 1 year of full-time study, normally beginning in September.

1. Applicants should have an Honours Degree in Classics or a related field, including at least two years study in both Greek and Latin. Students expecting to complete the M.A. Degree within 12 months must have at least 24 undergraduate credit hours in one language (Greek or Latin) and 18 undergraduate credit hours in the other. Other applicants may be required to take 3 or more credit hours at the undergraduate level, in addition to their graduate course work.

2. Students will complete 18 credit hours in courses at the 6000 level (including 6100 and 6101) plus any additional courses the Department may deem necessary. The required courses 6100 and 6101 involve the intensive reading of ancient texts and also introduce students systematically to the most important research methods in Classics, including palaeography, textual criticism, bibliography, and historiography. Texts and methods chosen may vary according to the availability of instructors.

3. Students are also required to complete one of the following:
   a. Research Essay
      Students will complete a research essay (approximately 15,000 words), normally in the third semester of their program of study. The essay will be graded by two members of faculty and will be assigned a PASS/FAIL grade.
   b. Translation Examination
      Students will be required to pass two exams based on a reading list of Greek and Roman authors. One exam will be on Greek authors and one on Latin authors. The exams test students' ability to translate from Greek and Latin texts into English and will also require some commentary on the set texts. Students are expected to write these exams in the third semester of their program of study. The exam will be graded by two members of faculty and will be assigned a PASS/FAIL grade.

4. Students are required to complete an examination testing their competence in German, Italian or French, as early as possible in their program of study. This examination will be assigned a PASS/FAIL grade. (See Evaluation, Evaluation of Graduate Students, 4.)
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 normally be evaluated internally and in accordance with the requirements of the School of Graduate Studies.

6.8.3 Courses
The following courses will be offered to meet the requirements of candidates, as far as resources of the Department will allow.

Core Courses
6000 Advanced Micro-economic Theory
6001 Advanced Macro-economic Theory
6002 Econometrics
6009 Graduate Seminar (2 credit hours)

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
6040 Industrial Economics

Master's Essay Course
6999 Master's Essay

Note: Additional courses may be arranged, so far as the exigencies of the Department allow, to meet the particular needs of candidates.

6.9 English Language and Literature
Associate Professor and Interim Head of the Department
L.F. Balisch
The degrees of Master of Arts and Doctor of Philosophy are offered in English Language and Literature.
Candidates for the M.A. in English may complete the program as either part-time or full-time students. Candidates for the Ph.D. in English must be in attendance as full-time students for at least three semesters of the program.

6.9.1 Master of Arts
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 candidates 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. Candidates 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.

6.9.2 Program of Study
1. Thesis Option
   a. Candidates 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.
   b. Candidates 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 candidate's third semester. The Departmental Graduate Studies Committee shall return the thesis proposal to the candidate 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. Candidates 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.
6.9.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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 Critical 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.

5900 Bibliography and Research Methods
6403 Etymology (same as Linguistics 6403)
6420 English Dialectology I
6421 English Dialectology II
6999 Master's Essay (for non-thesis students)
7003 Trends in Contemporary Critical Theory
7004 English Phonology and Morphology
7005 The Syntactic Structure of English
7020-25 Special Topics in English
7032 Studies in Old English I
7033 Studies in Old English II
7034 Studies in Middle English I
7035 Studies in Middle English II
7036 Studies in Middle English III
7037 Studies in 16th-Century Literature I
7038 Studies in 16th-Century Literature II
7039 Studies in 16th-Century Literature III
7040 Studies in 16th-Century Literature IV
7041 Studies in 17th-Century British Literature I
7042 Studies in 17th-Century British Literature II
7043 Studies in 17th-Century British Literature III
7044 Studies in 17th-Century British Literature IV
7045 Studies in 18th-Century British Literature I
7046 Studies in 18th-Century British Literature II
7047 Studies in 18th-Century British Literature III
7048 Studies in 18th-Century British Literature IV
7049 Studies in 19th-Century British Literature I
7050 Studies in 19th-Century British Literature II
7051 Studies in 19th-Century British Literature III
7052 Studies in 19th-Century British Literature IV
7053 Studies in 20th-Century British Literature I
7054 Studies in 20th-Century British Literature II
7055 Studies in 20th-Century British Literature III
7056 Studies in 20th-Century British Literature IV
7057 Studies in Pre-19th Century American Literature
7058 Studies in 19th Century American Literature I
7059 Studies in 19th Century American Literature II
7060 Studies in 19th Century American Literature III
7061 Studies in 20th Century American Literature I
7062 Studies in 20th Century American Literature II
7063 Studies in 20th Century American Literature III
7064 Studies in 20th Century American Literature IV
7065 Studies in Pre-19th Century Canadian Literature
7066 Studies in 19th Century Canadian Literature I
7067 Studies in 19th Century Canadian Literature II
7068 Studies in 19th Century Canadian Literature III
7069 Studies in 20th Century Canadian Literature I
7070 Studies in 20th Century Canadian Literature II
7071 Studies in 20th Century Canadian Literature III
7072 Studies in 20th Century Canadian Literature IV
7073 Studies in Newfoundland Literature I
7074 Studies in Newfoundland Literature II
7075 Studies in Newfoundland Literature III
7076 Studies in Anglo-Irish Literature I
7077 Studies in Anglo-Irish Literature II
7078 Studies in Modern Drama
7079 Studies in Post-Colonial Literature I
7080 Studies in Post-Colonial Literature II
7081 Studies in Post-Colonial Literature III
7082 Studies in Critical Theory I
7083 Studies in Critical Theory II
7084 Studies in Critical Theory III
7085 Special Readings in English I
7086 Special Readings in English II
7087 Special Readings in English III
6.10 Ethnomusicology

Professor and Director
E. Waterman

Associate Professor and Associate Director
M. Cheramy

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.

6.10.1 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 tradition.

Candidates 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. Candidates with deficiencies in any of these areas may be required to take remedial course work prior or in addition to the required program.

6.10.2 Program Requirements

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 6010, 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. Research paper (Music 7002) on a topic chosen by the student with his/her 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 6010, 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. Six 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 candidate to the Interdisciplinary Advisory Committee no later than the beginning of the third term of study.

6.10.3 Courses

Theories and Methods:
Music 6001 Research Methods
Music 6002 Graduate Seminar
Music 7001 Research Problems and Methods in Ethnomusicology
Music 7002 Research Paper
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
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 Music Industries Seminar
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
Music 7800-09 Special Topics in Music
Folklore 6511-29 Special Topics in Folklore
Folklore 6570-79 Reading Course in Folklore

6.11 Folklore
Associate Professor and Head of the Department
D. Tye

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.

6.11.1 Master of Arts
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 candidate'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 candidate'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 candidate, 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 candidate selecting the M.A. with comprehensive examination option shall normally submit, by the end of the candidate's second semester, written notification of intention to take comprehensives.
   iii. Each candidate selecting this option shall normally write the comprehensive examination at the end of the candidate'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. The required courses are:
      - 6010, 6020, and 6030, normally taken as an integrated foundation in the Fall semester.
      - 6740 or 6800 and at least one additional course selected from the following: 6551, 6740, 6760, 6790, 6800.
      - At least one of the following: 6100, 6120, 6130, 6200, 6210, 6220, 6250, 6260, 6360, 6720.
      - At least one of the following: 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 the Co-operative Education Services Centre (CESC) 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 by the CESC 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 CESC shall be responsible for finding an alternative acceptable to the Head of Folklore and the CESC. By entering the competition, students give permission for the CESC to supply their Memorial University of Newfoundland transcripts to potential employers.
   iv. Each work term placement will be supervised by the candidate's program Supervisor, the on-site Supervisor assigned by the employer and the CESC Co-ordinator. The overall evaluation of the work term is the responsibility of the program Supervisor, on-site Supervisor and CESC Co-ordinator. The work term shall consist of two components:
      - On-the-job Student Performance as evaluated by the on-site Supervisor and CESC Co-ordinator, in consultation with the program Supervisor.
      - A Work Report graded by the program Supervisor in consultation with the on-site Supervisor.
   v. 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.
   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.

6.11.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, 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.):

**Cooperative 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
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
6740 Public Sector Folklore
6750 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

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.

6.11.3 Folklore and Language Archive (MUNFLA)

Chair, Advisory Committee
Dean of Arts, Dr. R. Tremblay

Chair, Management Committee
Dr. P. Smith

Archivist
P. Fulton
Archival Assistant
P. Cox

Folklore Transcriber
B. Reddy

Honorary Research Associate (Folklore)
V.M. Halpert

Honorary Research Associate (Language and Folklore)
J.D.A. Widdowson

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 and the Canadian Council of Archives.

The Archive contains diverse materials, donated by more than 11,000 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, 4,000 commercial recordings, 20,000 photographs, 2,000 printed documents, 16,000 manuscripts, and 800 video tape recordings.

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 to munfla@mun.ca, or by telephone to (709) 737-8401, or by fax to (709) 737-4718, or through the website at www.mun.ca/folklore/munfla.

6.12 French
Professor and Interim Head of the Department
V. Harger-Grinling

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. Candidates 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 Arts, Department of French and Spanish 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 second-class 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 full-time 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 candidate, 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 candidate'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.

6.12.1 Courses
A selection of the following graduate courses will be offered to meet candidates' requirements, as far as the resources of the Department will allow:

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

Nota: "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
Professeur et directeur intérimaire du département
V. Harger-Grinling

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 littératures et cultures francophones) offerte par la Faculté des Arts, le Département d'études françaises et hispaniques 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 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 choisis 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.

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 deuxième cycle suivants sera offert afin de répondre aux besoins des étudiants inscrits au programme de maîtrise selon les ressources disponibles au département:

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 Parallélité et cultures traditionnelles

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 français
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.
6.13 Geography

Associate Professor and Head of the Department
C. Mather

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. Candidates 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. Candidates 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. Candidates 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 candidates who have not already completed equivalent courses at the Honours or post-graduate level.
9. Candidates 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 candidate will be required to present a seminar on his or her research to the Department.
11. Each candidate must submit a thesis based on his or her own original research. This thesis will be examined in accordance with the General Regulations of the School of Graduate Studies.

6.13.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates 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

6.14 German

Associate Professor and Head of the Department
E. Warkentin

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. Candidates for the M.A. degree in German are normally expected to have completed an Honours degree with a minimum of second-class standing. In addition to the general requirements, candidates will be expected to have acquired a superior knowledge of the spoken and written language as determined by the Department prior to admission.
2. Students will be required to demonstrate superior German language skills as determined by the Department prior to admission to the program.
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. Students may choose from two modes of completing the M.A. program, in accordance with the Graduate Studies Regulations Governing the Degree of Master of Arts:
   a. Candidates complete at least 18 credit hours of course work and submit a thesis. The entire program of study and research will
normally take one year of full-time study. The M.A. thesis will be based on research conducted by the student.

i. The thesis will be examined in accordance with General Regulation, Thesis and Reports.

ii. Normally, one of the assigned examiners of the thesis will be external to the Department.

b. Candidates complete at least 18 credit hours of course work and write a comprehensive examination. The entire program of study and research will normally take one year of full-time study.

i. The comprehensive examination shall be examined in accordance with the General Regulations, Comprehensive Examinations.

ii. Material to be covered on the M.A. comprehensive exam is normally determined by consultation between the student and the Head of the Department (or designate). The exam is written in two sittings: one exam will cover the student’s chosen area and the other will cover the student’s reading list and literary terminology. A final component of the comprehensive exam is an oral examination on the eras or issues covered in the written portion of the exam.

5. All students, regardless of the mode of completing the requirements for the M.A., will be required to complete German 6103.

6.14.1 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

- 6000 Issues in Modern Technology, Literature and Culture
- 6001 Issues in Literature on the Edges of Society
- 6100 Issues in the History of the German Language
- 6103 Bibliography and Research Methods
- 6200 Issues in Early German Literature and Culture I
- 6201 Issues in Early German Literature and Culture II
- 6300 Issues in Early Modern German Literature and Culture I
- 6301 Issues in Early Modern German Literature and Culture II
- 6800 Issues in Modern German Literature and Culture I
- 6801 Issues in Modern German Literature and Culture II
- 6900 Issues in Contemporary German Literature and Culture I
- 6901 Issues in Contemporary German Literature and Culture II
- 6903 Issues in Propaganda and Censorship
- 7000 Special Subject or Author I
- 7001 Special Subject or Author II
- 7002-7020 Special Topics in German Studies

6.15 History
Professor and Head of the Department
C. Youé

The degrees of Doctor of Philosophy and Master of Arts are offered in History by full-time or part-time study.

6.15.1 Master of Arts
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. candidates 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. candidates who choose the thesis option shall complete 9 credit hours, 6 of which shall normally be 6190 and 6200, plus a thesis.

4. Where a student’s major research project requires him or her to read a language other than English, he or she must demonstrate a reading knowledge of this language through an exam or other method subject to the approval of the Graduate Committee.

6.15.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates 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 I
- 6999 Masters Research Paper (12 credit hours)
6.16 Linguistics
Professor and Head of the Department
M. MacKenzie

The degrees of Master of Arts and Doctor of Philosophy are offered in Linguistics.

6.16.1 Master of Arts

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 candidate'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.

6.16.2 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. 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: 6150)

6200 Generative Phonology

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 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: 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)

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)

7990-03 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.

6.17 Philosophy
Professor and Head of the Department
J. Bradley

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 candidate must complete 15 credit hours - 3 credit hours from 6000, 9 credit hours from 6011-6016, any 3 credit hours from 6101-6102 - and a thesis.

Normally, a full-time candidate will complete all the 15 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.

6.17.1 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

6.18 Political Science

**Professor and Head of the Department**

R. Levy

The Degree of Master of Arts is offered in Political Science by full-time and part-time study.

**Master of Arts**

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 normally complete a minimum of 12 credit hours in graduate program courses. These 12 credit hours are from required courses: 6000, 6010, and 2 subfield surveys (two of 6100, 6200, 6300, 6400, 6500, 6600, or 6700). 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 normally complete a minimum of 24 credit hours in graduate program courses. Twenty-one credit hours are from required courses: 6000, 6010, 6030, 6031, 6790, and a subfield survey (one of 6100, 6200, 6300, 6400, 6500, 6600, or 6700). 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 co-requisite, 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 who choose the M.A. with research paper option shall complete a minimum of 24 credit hours, fifteen of which shall normally be 6000, 6010, and 6999.
   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.

6.18.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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
Religious Studies

Professor and Head of the Department
D.N. Bell

The degree of Master of Arts (M.A.) is offered in Religious Studies and may be taken by full-time or part-time study. Candidates for the M.A. in Religious Studies may choose between the M.A. with Thesis option and the M.A. with a Project option. Candidates must specify which M.A. stream they wish to pursue upon entry into the program.

1. Admission requirements are set forth in the Regulations Governing the Degree of Master of Arts. An applicant should have completed a minimum of 45 credit hours in Religious Studies courses at the undergraduate level with at least the grade of B in each. An applicant should have completed a minimum of 45 credit hours in Religious Studies courses at the undergraduate level with at least the grade of B in each. An applicant's overall undergraduate program must represent, to the satisfaction of the Department, a solid groundwork for graduate studies.

2. A candidate who does not hold an Honours Degree or its equivalent shall be required to complete such additional undergraduate courses as the Department may deem necessary. These courses may be required as prerequisites to admission to the program, or as an additional constituent part of the program, at the discretion of the Department.

3. Upon acceptance into the program, each candidate will be assigned a Supervisor, whose duty it shall be to assist the candidate.

4. Students will be required to satisfy the Department as to proficiency in any language or technical facility deemed necessary by the Graduate Studies Committee of the Department for successful completion of the thesis or project.

6.19.1 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 may write a thesis in one of the following areas: Hinduism, classical Confucianism, philosophical Daoism, Chinese and North American Buddhism, Buddhism and psychology, Judaism, Christianity, Hebrew Bible, New Testament, religious history of Canada, religious history of Newfoundland and Labrador, medieval religious thought, religion and culture (including pop culture), New Age religious movements, ethics and social justice, philosophy of religion.
   d. Before a student begins writing his or her thesis, he/she 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 three required courses and at least one other from the course list. The three required courses are: RS 6100 Methods and Theories in Religious Studies; 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 his or her project, he/she 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 four required courses and at least two others, one of which may be from a cognate discipline (upon approval). The four required courses are: RS 6100 Methods and Theories in Religious Studies; RS 6120 Studies in Religious Texts; RS 6130 Religious Contexts; and RS 699A/B Advanced Research in Religious Studies.

6.19.2 Courses

6100 Methods and Theories in Religious Studies (Note: Credit may not be obtained for both Religious Studies 6100 and the former Religious Studies 6000)
6120 Studies in Religious Texts
6130 Studies in Religious Movements and Institutions
6220 Selected Topics in New Testament
6230 Selected Topics in Hebrew Bible/Old Testament
6300 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 Topics 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)
6.20 Sociology

Associate Professor and Head of the Department
A. Micucci

The Degrees of Master of Arts, Master of Philosophy and Doctor of Philosophy are offered in Sociology by full-time or part-time study. The Department has developed foci at the doctoral level in the areas of Maritime Sociology, Gender, and Work and Development but other fields of specialization are available at the Master's level including Social Theory, Sociology of Knowledge, Social Inequality and Criminology. Graduate courses are taught as tutorials or small seminars.

6.20.1 Master of Arts

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 12 credit hours in graduate courses, normally including the Graduate Seminar (6880) and Methods of Sociological Research (6040), 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.

3. The M.A. Degree by course work requires the completion of 24 credit hours, normally including the Graduate Seminar (6880), Methods of Sociological Research (6040), Social Theory (6150), Master's Research Paper (6900) and three electives. These courses should be taken during the first two semesters of full-time study. The research paper (Sociology 6900) will be supervised by a faculty member and must be presented at a Departmental seminar. The Supervisor and one other member of Department will grade the paper. The research paper should be written in the third semester of full-time study.

6.20.1.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

- 6040 Methods of Sociological Research
- 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 (cross-listed as Women's Studies 6380)
- 6390 Sociology of Culture
- 6610 Socialization
- 6620 Current Topics in Social Behaviour
- 6680 Sociology Graduate Seminar

7 Regulations Governing the Degree of Master of Arts and Education (Education and Francophone Literatures and Cultures)

Professor and Dean of Arts
R. Tremblay

Associate Professor and Dean of Education
D. Dibbon

Associate Professor and Acting Associate Dean of Arts (Graduate and Research)
L. Rankin

Associate Professor and Associate Dean of Education
T. Seifert

The degree of Master of Arts and Education (Education and Francophone Literatures and Cultures) is jointly offered by the Faculty of Arts 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 French and Spanish (or delegate) and one appointed faculty member. The faculty member shall come from either the Faculty of Education or the Department of French and Spanish in alternating years. The Administrative Committee is responsible for admissions and advising students on course selection when appropriate.

7.1 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.

7.2 Program of Study
1. Candidates 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 candidates shall be required to complete:
   - French 6800 Littératures 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 French and Spanish 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
   - Three credit hours from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate for each candidate’s program 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 French and Spanish graduate course offerings as deemed appropriate for each candidate’s program by the Administrative Committee.
   - Education 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies

7.3 Evaluation
1. In order to continue as a candidate for the degree of Master of Arts and Education (Education and Francophone Literatures and Cultures), a candidate shall obtain an A or B grade in each required course. A candidate 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 candidate’s graduate program. Should a grade of less than B be obtained in the repeated/ replacement course, or any other program course, the candidate shall be required to withdraw from the program.
2. When the Administrative Committee has determined, through consultation with the candidate, graduate course instructors, and the project supervisor, if applicable, that the candidate’s work has fallen below satisfactory level, they may request the Dean of the Faculty of Education and the Head of the Department of French and Spanish recommend to the Dean of Graduate Studies that the candidate’s program be terminated.

7.4 Courses
French 6800 Littératures 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
Education 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
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)

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)
Professeure et Doyenne des Arts
R. Tremblay

Professeur Agrégé et Doyen d’Éducation
D. Dibbon

Professeure Agrégé et Doyenne Adjoint Intérimaire aux Etudes Supérieures et à la Recherche
L. Rankin

Professeur Agrégé et Doyen adjoint d’Éducation
T. Seifert

La Maîtrise ès Arts et Éducation (Enseignement des littératures et cultures francophones) est offerte 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 règlements en conjonction avec les Règlements généraux 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 Éducation (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. Il 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) choisiront l’une ou l’autre des deux options suivantes:
   - 1ère option Programme menant au projet terminal
   - 2ème 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 6667 Second Language Teaching, Learning and Curriculum
     - Education 6668 Current Issues in Second Language Education
     - Education 6669 Graduate Seminar in Second Language Education
   - Trois heures crédits de cours de la Faculté d’Éducation jugés appropriés par le Comité administratif.
3. L’étudiant ayant choisi la 1ère option devra compléter:
   - Education 6392: Project in Curriculum, Teaching and Learning Studies
4. L’étudiant ayant choisi la 2ème 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 candidat 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
Education 6100 Research Designs and Methods in Education
Education 6390 Research and Development in Teaching and Learning Studies
Education 6392 Project in Curriculum, Teaching and Learning Studies
Education 6667 Second Language Teaching, Learning and Curriculum
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)
Autres cours de cycle supérieur offerts par la Faculté d’Éducation et le Département d’études françaises et hispaniques jugés appropriés par le Comité administratif.

8 Regulations Governing the Degree of Master of Business Administration

Professor and Dean
W. Zerbe

Associate Professor and Associate Dean (Academic Programs)
T. Clift

Assistant Professor and Director of Graduate Programs (Business)
P.A. Coady

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.

8.1 Qualifications for Admission
1. Admission is limited and competitive. To be considered for admission to the Master of Business Administration program, an applicant shall normally hold at least a Bachelor’s Degree, with a minimum ‘B’ standing, from an institution recognized by Senate. Qualified applicants with relevant employment experience will normally receive preference during the evaluation of applications.
2. 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 present a high GMAT score, have a minimum of 10 years of full-
time managerial and executive experience, and have completed several years of university studies. The Faculty may also take into account relevant professional credentials. Applicants who do not meet normal admission requirements may be considered for admission, with a high level of achievement, certain undergraduate courses before being considered for admission.

3. When circumstances warrant, and only on the strong recommendation of the Faculty of Business Administration, consideration may be given to candidates who do not meet some of the above requirements.

4. 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 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). Those submitting results of the Test of Written English (TWE) as well, with a score of 4 or better, will receive preference in the evaluation of English proficiency. Information regarding both tests is available from the Educational Testing Service at www.ets.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

8.2 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 March 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.

8.3 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 three 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. Two copies of the Faculty's Employment Experience Information Form.
   c. Two 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.
   d. 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.
   e. Where applicable, an official TOEFL score report (or another equivalent test acceptable to the School of Graduate Studies), to be forwarded directly by the Educational Testing Service.
   f. Application files are evaluated only when all required items have been received.

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, applicants must give written notice to the School of Graduate Studies of their 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.

8.4 Direct Entry and Advanced Standing

1. Students who have an undergraduate degree in business with significantly high academic standing may apply for direct entry into the second year of the M.B.A. Program. Their course load will be 8107, 8209, 8208; 3 credit hours chosen from 8208 or 9322 or another approved strategy course; 3 credit hours chosen from 9020, 9325, or 9326 or another approved international course; plus 18-credit hours in electives from the schedule of M.B.A. electives listed in Table III. Direct entry will normally be considered if the undergraduate business degree with significantly high academic standing was awarded within seven years of the year for which admission is being sought. The Committee on Graduate Studies reserves the right to require additional courses where there are noted deficiencies in a student's undergraduate record.

2. The Faculty's Committee on Graduate Studies may recommend advanced standing for students who do not qualify for direct entry at the time of admission to the M.B.A. program. After admission and normally no later than one week after registration, all other students may apply for advanced standing for 8000 level courses in the M.B.A. program. Advanced standing for any 8000 level M.B.A. course would normally require that the student had achieved a 'B+' or better in a letter grade system or the equivalent to a grade of 75% or better at Memorial University of Newfoundland in undergraduate courses required for advanced standing. The faculty's committee on graduate studies will normally consider for advanced standing if nominal deficiencies in a student's undergraduate record.

3. The following information must be submitted to the Associate Dean, Faculty of Business Administration, for evaluation by the Committee:
   a. a detailed course outline for each course to be considered in the application for advanced standing;
   b. a description of the method of evaluation used in each such course, the grades received, and the completion dates.

4. Students who enter the M.B.A. program with previous graduate degrees may be granted transfer credit for two non-business, non-specified elective courses by the Faculty's Committee on Graduate Studies. The remaining electives will be chosen from courses offered by the Faculty of Business Administration. This will reduce their program from 20 courses to 18 courses. This does not apply to students with degrees such as the LLB and Medical Doctor degrees that are not master's degrees. Courses will normally be considered for advanced standing if they are part of a degree that has been awarded within seven years of the year for which admission is being sought.

8.5 Programs of Study

1. The programs of study include:
   a. a 60 credit hour all-course program for candidates entering with an undergraduate degree in any area other than business. Thirty-six credit hours in program courses are required courses and are specified in Table I; the remaining 24 credit hours in program courses are elective courses chosen in accordance with the electives noted below. It is noted that of the 24 credit hours in electives candidates are required to complete 3 credit hours in the area of international business chosen from 9020, 9325, 9326 or another approved international course.
b. a 48 credit hour thesis option program for candidates entering with an undergraduate degree in any area other than business. Thirty-six credit hours in program courses are compulsory and are specified in Table I; the remaining 12 credit hours in program courses shall consist of 9103, 9 credit hours in courses agreed upon by the student and his or her Supervisor, plus a thesis. Additional courses, which may enhance the research area of the candidate, may be recommended by the Supervisor to the Committee on Graduate Studies.

c. a 30 credit hour all-course program for direct entry candidates. Twelve credit hours of the program courses are required and are specified in Table II; the remaining 18 credit hours for candidates in the all-course program are electives chosen in accordance with the electives noted below.

d. a 18 credit hour thesis option program for direct entry candidates. Courses shall normally consist of the following 12 credit hours: 8107, 8208, 8209 and 9103, and 6 credit hours in courses agreed upon by the student and his or her Supervisor, plus a thesis. Additional courses, which may enhance the research area of the candidate, may be recommended by the Supervisor to the Committee on Graduate Studies.

2. Electives in the all-course programs may be chosen from the following:
   a. approved business electives as listed in Table III;
   b. up to 6 credit hours in courses from other 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;
   c. a Research Project or projects, which may be assigned up to 9 credit hours, as approved by the Dean of Graduate Studies on the recommendation of the Faculty of Business Administration;
   d. any other course or project deemed to be of satisfactory content and rigour as approved by the Dean of Graduate Studies on the recommendation of the Faculty of Business Administration.

3. The Faculty’s Committee on Graduate Studies reserves the right to restrict candidates from taking particular M.B.A. courses if it is deemed that those courses do not add sufficient value beyond courses that the candidate has completed at the undergraduate level.

4. Students are required to observe certain approved co- or prerequisites in scheduling their courses. These are indicated in Table V.

5. Students shall successfully complete the requirements of Business 8103 as part of the first 36 credit hours of their programs.

6. Changes to a student’s prescribed program, including the specified course load, may have the prior approval of the Dean of Graduate Studies on the recommendation of the Faculty of Business Administration.

8.6 Evaluation

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 Graduate Studies in accordance with the requirements outlined in all the clauses below.

2. 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 candidate has obtained a mark of 65% or higher.

3. A candidate is required to withdraw from the M.B.A. program if:
   a. a final grade of ‘D’ or ‘F’ is obtained in two courses, or
   b. a final grade of ‘C’ or less is obtained in three courses, or
   c. a final grade of ‘C’ or less is obtained in a repeated course.

4. The above clause notwithstanding:
   a. to remain in the program, a candidate who obtains a final grade of ‘C’ or less in any course must normally repeat that course when next offered, and is permitted to repeat that course only once. In the case of an elective course, a replacement course approved by the Committee on Graduate Studies may be substituted for the failed course. Only one such repetition/replacement of an elective course shall be permitted in the candidate’s graduate program.
   b. in some instances, at the discretion of the course instructor, and with the approval of the Associate Dean, Academic Programs, Faculty of Business Administration, a student who has received a grade of ‘C’ or less in any course may be permitted to complete remedial work and may be re-examined. A student who passes after re-examination will have “passed on the basis of re-examination” recorded on their transcript, and the original grade will remain. A student who receives a grade of ‘C’ or less after re-examination will be required to withdraw from the program. The original grade will count as part of the total number of final grades of ‘C’ or less permitted before a student is required to withdraw as specified above. The pursuit of remedial work may not be offered more than twice to an individual student.
8.7 Courses

The schedule of courses of the curriculum and elective courses are as follows:

Table I - Master of Business Administration Schedule of Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8103</td>
<td>Statistical Applications in Management</td>
<td>8204</td>
<td>Human Resource Management or B8210 Labour Relations</td>
</tr>
<tr>
<td>8104</td>
<td>Organizations: Behaviour and Structure</td>
<td>8205</td>
<td>Information Systems</td>
</tr>
<tr>
<td>8106</td>
<td>Marketing</td>
<td>8206</td>
<td>Managerial Finance</td>
</tr>
<tr>
<td>8107</td>
<td>Managing Ethics and Responsibility</td>
<td>8207</td>
<td>Operations Management</td>
</tr>
<tr>
<td>8108</td>
<td>Economics for Business</td>
<td>8208</td>
<td>Strategic Management</td>
</tr>
<tr>
<td>8109</td>
<td>Accounting for Management</td>
<td>8209</td>
<td>Leadership and Interpersonal Skills for Managers</td>
</tr>
</tbody>
</table>

Table II - Master of Business Administration Schedule of Required Courses - Direct Entry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8107</td>
<td>Managing Ethics and Responsibility</td>
<td>8209</td>
<td>Leadership and Interpersonal Skills for Managers</td>
</tr>
<tr>
<td>8208</td>
<td>Strategic Management</td>
<td></td>
<td>one course in the area of international business (9020, 9325, 9326 or another approved international course)</td>
</tr>
</tbody>
</table>

Table III - Master of Business Administration Schedule of M.B.A. Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8001-005</td>
<td>Special Topics</td>
</tr>
<tr>
<td>8202</td>
<td>Advanced Managerial Accounting</td>
</tr>
<tr>
<td>8203</td>
<td>Management Science</td>
</tr>
<tr>
<td>9001-9019</td>
<td>Special Topics</td>
</tr>
<tr>
<td>9020</td>
<td>International Human Resource Management</td>
</tr>
<tr>
<td>9023-9050</td>
<td>Special Topics</td>
</tr>
<tr>
<td>9103</td>
<td>Research in Management</td>
</tr>
<tr>
<td>9301-03</td>
<td>Research Project (Variable Credit)</td>
</tr>
<tr>
<td>9306</td>
<td>International Strategic Management</td>
</tr>
<tr>
<td>9308</td>
<td>New Venture Creation</td>
</tr>
<tr>
<td>9309</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>9310</td>
<td>Management Science Applications</td>
</tr>
<tr>
<td>9311</td>
<td>Seminar in Human Resource Management</td>
</tr>
<tr>
<td>9312</td>
<td>Financial Management</td>
</tr>
<tr>
<td>9314</td>
<td>Business and Taxation Law</td>
</tr>
<tr>
<td>9315</td>
<td>Advanced Financial Accounting</td>
</tr>
<tr>
<td>9316</td>
<td>Information Systems Management</td>
</tr>
<tr>
<td>9317</td>
<td>Current Topics in Management</td>
</tr>
<tr>
<td>9318</td>
<td>Marketing Communications Management</td>
</tr>
<tr>
<td>9320</td>
<td>Investments and Portfolio Management</td>
</tr>
<tr>
<td>9322</td>
<td>Strategic Management of Technology and Innovation</td>
</tr>
<tr>
<td>9323</td>
<td>Financial Forward, Futures, and Options Markets</td>
</tr>
<tr>
<td>9324</td>
<td>Gender, Work and Organizations</td>
</tr>
<tr>
<td>9325</td>
<td>Accessing International Markets</td>
</tr>
<tr>
<td>9326</td>
<td>International Finance</td>
</tr>
<tr>
<td>9328</td>
<td>Change Management</td>
</tr>
<tr>
<td>9329</td>
<td>Labour Law</td>
</tr>
</tbody>
</table>

Two graduate electives from programs in other Faculties and Schools in the School of Graduate Studies.

Table IV - Master of Business Administration Course Restrictions

<table>
<thead>
<tr>
<th>Present Course</th>
<th>Replaces Course</th>
<th>Present Course</th>
<th>Replaces Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>8107</td>
<td>9201</td>
<td>9321</td>
<td>8210</td>
</tr>
<tr>
<td>8108</td>
<td>8101 or 8201</td>
<td>9324</td>
<td>9004</td>
</tr>
<tr>
<td>8109</td>
<td>8102 or 8202</td>
<td>9325</td>
<td>9005</td>
</tr>
<tr>
<td>8207</td>
<td>9319</td>
<td>9326</td>
<td>9010</td>
</tr>
<tr>
<td>8208</td>
<td>9101</td>
<td>9327</td>
<td>9007</td>
</tr>
</tbody>
</table>
Table V - Master of Business Administration Prerequisite/Co-requisite

<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisite/Co-requisite*</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8103</td>
<td>Nil</td>
<td>8203</td>
</tr>
<tr>
<td>8104</td>
<td>Nil</td>
<td>8204</td>
</tr>
<tr>
<td>8106</td>
<td>Nil</td>
<td>8104</td>
</tr>
<tr>
<td>8107</td>
<td>8103*</td>
<td>9020</td>
</tr>
<tr>
<td>8108</td>
<td>8104</td>
<td>9021</td>
</tr>
<tr>
<td>8109</td>
<td>8105</td>
<td>9103</td>
</tr>
<tr>
<td>8205</td>
<td>Nil</td>
<td>9301</td>
</tr>
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<td>8206</td>
<td>8103*, 8108*</td>
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<td>9312</td>
</tr>
<tr>
<td>8312</td>
<td>8103, 8108, 8109, 8206</td>
<td>9314</td>
</tr>
<tr>
<td>8316</td>
<td>8103, 8108, 8109, 8206</td>
<td>9317</td>
</tr>
<tr>
<td>8318</td>
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<td>9318</td>
</tr>
<tr>
<td>8320</td>
<td>8103, 8108, 8109, 8206</td>
<td>9322</td>
</tr>
<tr>
<td>8323</td>
<td>8103, 8104, 8106, 8108, 8109, 8205, 8206, 8207, 8208*</td>
<td>9323</td>
</tr>
<tr>
<td>8324</td>
<td>8104</td>
<td>9324</td>
</tr>
<tr>
<td>8325</td>
<td>8106</td>
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<td>8328</td>
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<td>9328</td>
</tr>
<tr>
<td>8329</td>
<td>8106</td>
<td>9329</td>
</tr>
</tbody>
</table>

Note: All 9000-level courses require the prior completion of nine courses, including any specific prerequisites or co-requisites.

9 Regulations Governing the Degree of Master of Business Administration (Executive Option in Petroleum)

Professor and Academic Director
T. Husain

The Degree of Master of Business Administration (Executive Option in Petroleum), or EMBA (Petroleum), is cohort-driven. These regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

The EMBA (Petroleum) is a comprehensive program that provides an international understanding of the entire nature of the oil and gas industry value chain.

The EMBA (Petroleum) program is offered by full-time study and involves 17 courses (54 credit hours) over four semesters. It should be noted that the OGS 6099 Project is a six credit-hour course that is offered over the third and fourth semesters.

Administration

1. The program shall be administered by an Academic Director, who shall be appointed by the Dean of Graduate Studies following discussion with the Dean of Business Administration and the Executive Director of the Oil and Gas Development Partnership (OGDP).

2. The Academic Director shall be the Chair of a Board of Studies for EMBA (Petroleum) for the purposes of administering the program. The Board of Studies will consist of three members from the Faculty of Business Administration, the Associate Dean (Academic Programs) of Business Administration and the Executive Director of the OGDP as ex officio members. Appointments of the members of the Board of Studies will be by the Dean of Business Administration following discussion with the Executive Director of the OGDP. Normally all appointments will be for a period of three years.
9.1 Qualifications for Admission

1. Admission is limited and competitive. To be considered for admission to the EMBA (Petroleum) program, an applicant shall normally hold at least a bachelor’s degree, with a minimum ‘B’ standing, from an institution recognized by Memorial University of Newfoundland.

2. Applicants with substantial management experience in the oil and gas sector will receive preference during evaluation of applications. Normally, a minimum of five years experience in the oil and gas sector is required.

3. Applicants who did not complete a four-year bachelor’s degree at a recognized university where English is the primary language of instruction must submit an acceptable score on the Test of English as a Foreign Language (TOEFL). Information regarding this test is available from the Educational Testing Service at www.ets.org.

4. Although all the criteria noted above are important, the Board of Studies will assess the applicant’s entire profile when making its final decision. Significant strengths in one area may help compensate for weaknesses in another area.

5. In selecting candidates for any particular cohort, the Board of Studies will attempt to ensure that there is a breadth of managerial experience and practical backgrounds within the cohort as this is important to the students’ learning environment. Student experience is expected to contribute to and enhance the learning experience for the entire cohort.

9.2 Deadlines for Application Submissions

1. Applications and all supporting documents must be received by June 15 from Canadian applicants. Application from international students should be complete at least four months before the proposed commencement date. Individuals submitting applications later than the above dates are not assured of consideration for admission to the cohort desired; their applications will be processed only if time and resources permit. Normally, the cohort will commence study during the Fall semester but the University reserves the right to commence a cohort during any semester.

2. The Board of Studies reserves the right to offer an EMBA (Petroleum) program during any period where there is deemed to be sufficient demand. Further, the Board of Studies reserves the right to restrict the size of any cohort of students admitted to the EMBA (Petroleum) program.

9.3 Procedure for Admission

1. Applications for admission to the EMBA (Petroleum) program must be made on the appropriate form to the School of Graduate Studies.

2. Application files are evaluated only when all required items have been received. The following documents must be submitted in support of the official application form:
   a. Letter of appraisal from two work-related referees.
   b. Two copies of the Employment Experience Information form.
   c. Two official transcripts from each university or other post-secondary institution previously attended, to be sent directly to the School of Graduate Studies.
   d. The official GMAT score report and TOEFL results, if required, are to be sent directly to the University by the applicable Testing Service.

3. Admission shall be by the Dean of the School of Graduate Studies on the recommendation of the Board of Studies. Upon notification of acceptance into the EMBA (Petroleum) program, applicants must give written notice to the School of Graduate Studies of their 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. In order to confirm admission, the admitted student will be required to submit a deposit with the notice. The amount of the deposit will be specified in the letter of admission and will reflect the current tuition for the program that will be determined on the basis of tuition plus an administrative fee for the program. In the event that the applicant decides not to enter the program (at any point in time after his or her application has been approved and the deposit received), this deposit will be considered to have been forfeited.

9.4 Programs of Study

1. The EMBA (Petroleum) program is a cohort-driven and structured so that students complete a 17 course, 54 credit-hour program of study. It should be noted that the OGS 6099 Project is a six credit-hour course that is offered over the third and fourth semesters. The program will normally be delivered over four academic terms, and the contact time per course will be 30 hours, recognizing the experience of the candidates and the extended time between classes which will allow the assignment of more course-related work to be completed outside of the classroom environment. In some instances the program may be offered over a shorter duration. The 17 course, 54 credit-hour program structure is outlined in Table I - Master of Business Administration (Executive Option in Petroleum) Program of Study.

   Table I - Master of Business Administration (Executive Option in Petroleum) Program of Study

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>OGS 6601</td>
<td>OGS 6811</td>
<td>OGS 6205</td>
<td>OGS 6801</td>
</tr>
<tr>
<td>Petroleum</td>
<td>Economics of Petroleum Exploration</td>
<td>Information Systems</td>
<td>Social and Economics Dimensions</td>
</tr>
<tr>
<td>Exploration</td>
<td>and Development</td>
<td></td>
<td>of Policy and Planning</td>
</tr>
<tr>
<td>Appraisal and</td>
<td></td>
<td>205 Operations</td>
<td>OGS 6801</td>
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<tr>
<td>Development</td>
<td></td>
<td>Management</td>
<td>Petroleum Exploration and</td>
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<td>OGS 6812</td>
<td></td>
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<td>Development</td>
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9.5 Evaluation

1. The Board of Studies for the EMBA (Petroleum) program constitutes the examining body for all courses in this program and shall
assess the standing of every student in accordance with the requirements outlined in all the Clauses below.

2. Credit towards the EMBA (Petroleum) 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 candidate has obtained a mark of 65% or higher.

3. A candidate is required to withdraw from the EMBA (Petroleum) program if:
   a. a final grade of 'D' or 'F' is obtained in two courses, or
   b. a final grade of 'C' or less is obtained in three courses, or
   c. a final grade of 'C' or less is obtained in a repeated course.

4. The above clause notwithstanding:
   a. to remain in the program, a candidate who obtains a final grade of 'C' or less in any course must normally repeat that course when next offered, and is permitted to repeat that course only once.
   b. in some instances, at the discretion of the course instructor, and with the approval of the Board of Studies, a student who has received a grade of 'C' or less in any course may be permitted to complete remedial work and may be re-examined. A student who passes after re-examination will have "passed on the basis of a re-examination" recorded on his/her transcript and the original grade will remain. A student who receives a grade of 'C' or less after re-examination will be required to withdraw from the program. The original grade will count as part of the total number of final grades of 'C' or less permitted before a student is required to withdraw as specified above. The pursuit of remedial work may not be offered more than twice to an individual student.

10 Regulations Governing the Degree of Master of Education

Associate Professor and Dean
D. Dibbon

Associate Professor and Associate Dean
T. Seifert

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 Information 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 Arts, Department of French and Spanish, is available for candidates 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 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.

10.1 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 (i) an undergraduate degree with at least second class standing, or (ii) 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.

10.2 Program of Study

1. Candidates 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.

Candidates 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.

Candidates 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.

Candidates 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.

2. Candidates 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. A candidate with full-time status 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.
   b. A candidate 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. Candidates 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.

4. 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 candidate, 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.

10.3 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.

10.4 Evaluation
1. In order to continue as a candidate for the Master of Education Degree, a candidate 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 candidate's graduate program. Should a grade of less than 'B' be obtained in the repeated course, replacement course, or any other program course, the candidate shall be required to withdraw from the program.

2. When the Faculty has determined, through consultation with the candidate, the instructors of graduate courses, and the program advisor or thesis Supervisor that the candidate's work has fallen below satisfactory level, it may request that the Dean of Education recommend to the Dean that the candidate's program be terminated.

10.5 Thesis
See School of Graduate Studies General Regulation, Theses and Reports.

10.6 Program Regulations
Every candidate 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.

10.7 Appeals and Waivers Procedures
Candidates 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.

10.8 Specific Programs

10.8.1 Educational Leadership Studies
Educational Leadership Studies is designed to prepare candidates for leadership in Education.

1. Admission Requirements
   In addition to meeting the requirements in the School of Graduate Studies General Regulations,
   a. students must have completed a range and number of courses in Education deemed appropriate by the Faculty and Dean of Education.
   b. a minimum of two years of teaching/leadership experience is recommended.

2. Program Requirements
   a. all students in the Master of Education Program (Educational Leadership Studies) 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 e. below
      ▪ 9 credit hours (internship, paper folio, project, comprehensive course route) within closed electives as listed in e. below
   b. 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
   c. 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 studies.
   d. 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 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
   e. 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.

10.8.2 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

Option Two
In consultation with a faculty advisor, students may choose to design a program speciality which addresses their research interests. Specially 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.

1. Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations,

a. students must have completed a range and number of courses in Education deemed appropriate by the Faculty and Dean of Education.

b. a minimum of two years of teaching or related experience is recommended.

c. 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.

2. Program Requirements

a. 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

b. 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

c. 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.

d. 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.

e. students choosing the Special Education specialization within Curriculum, Teaching and Learning Studies must complete a thesis and at least two of the Special Education specialty courses.

f. 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 Practitioner Inquiry/Participatory Action Research. 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.

g. 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

h. Core speciality courses in the study of curriculum, teaching and learning areas:

Computers in Education
- 6610 Research on Computers in the Curriculum
- 6620 Issues and Trends in Educational Computing

Language and Literacy Studies
- 6106 Reading and Teaching Popular Culture
- 6108 Literacy and Language Education
- 6641 Writing in the Primary, Elementary and Secondary Schools
- 6642 Developmental Reading (K-8)
- 6643 Contemporary Issues in 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
- 6639 Technology and the Teaching and Learning of Mathematics

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

Social Justice Education
- 6105 Social and Cultural Difference and Education
- 6106 Reading and Teaching Popular Culture
- 6440 Family School Relations: Leadership and Policy Implications
- 6465 School Violence: Leadership and Policy Implications
- 6468 Critical Approaches to Educational Research
- 6909 Narrative Approaches to Teaching, Learning and Research
- 6913 Practitioner Inquiry/Participatory Action Research (prereq. 6469)

Social Studies Education
- 6670 Teaching and Learning Social Studies
- 6671 Research in Social Studies Education
- 6672 Issues and Trends in Social Studies

Special Education
- 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.

10.8.3 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 psychologist, regardless of his or her 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 his or her 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.
1. Admission Requirements
In addition to meeting the requirements in the School of Graduate Studies General Regulations, students:

a. must have completed Education 3210, Introduction to Counselling.

b. should have completed at least one undergraduate course on each of the following topics: statistics (Education 2900), assessment (Education 3280, 3290, 3950, 3955 or 4950), introduction to career education (Education 3211), introduction to exceptionality (Education 3220 or 3230). (Or their equivalent)

Note: Many of these courses are prerequisites to specific graduate courses and must be completed before taking those courses.

c. should normally have at least one year of teaching (or related work) experience.

d. 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).

e. 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.

f. should note the Graduate Record Examination may be required.

2. Program Requirements

a. 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)

b. 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.

c. 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.

d. 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.

e. Closed electives are those listed below:
   - 6703 Personal and Professional Development Group
   - 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). Candidates 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

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.

10.8.4 Post-Secondary Studies
The graduate programs in Post-Secondary Studies are designed to prepare candidates to function in a variety of roles in informal and formal post-secondary learning environments (including academic, technical, professional, adult 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.

1. Admission Requirements
In addition to meeting the requirements in the School of Graduate Studies General Regulations,

a. candidates must have completed an undergraduate course in statistics (Education 2900), adult learning (Education 2801), and post-secondary education (Education 2720), or have accumulated the equivalent experiences in each of the above three areas as approved by the Head of the Academic Unit;

b. two years of successful experience in working with adult learners is recommended;

c. and for the Graduate Diploma in Post-Secondary Studies (Health Professional Education) program, candidates must have appropriate academic qualifications and work experience in a health-related field.

2. Program Requirements (M.Ed.)

a. Candidates for the Master of Education (Post-Secondary Studies) are required to complete courses that form the program core.

   i. 6100 Research Designs and Methods in Education
   ii. 6801 Foundations of Post-Secondary Programs
   iii. 6802 Adult Learning and Development
   iv. 6803 Research in Post-Secondary Education

   b. In addition to meeting the requirements in the School of Graduate Studies General Regulations, students:

      i. must have completed Education 3210, Introduction to Counselling.
      ii. should have completed at least one undergraduate course on each of the following topics: statistics (Education 2900), assessment (Education 3280, 3290, 3950, 3955 or 4950), introduction to career education (Education 3211), introduction to exceptionality (Education 3220 or 3230). (Or their equivalent)

      Note: Many of these courses are prerequisites to specific graduate courses and must be completed before taking those courses.

      c. should normally have at least one year of teaching (or related work) experience.

      d. 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).

      e. 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.

      f. should note the Graduate Record Examination may be required.

Reference:
Candidates for the Master of Education (Post-Secondary Studies) are required to complete courses that form the program core.
10.8.5 Information Technology

The graduate program in Information Technology is offered in partnership with Cape Breton University (CBU). It is designed to facilitate the educational use of information 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.

Information technology in this Master of Education program encompasses 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 information technology in a teaching/learning situation;
- develop potential information technology leaders for the educational system;
- develop instructional designers, for a variety of educational settings, who are able to combine information technology with learning theory to enhance curriculum development and delivery;
- provide a basis for the continued professional development of educators in the area of information technology;
- develop an awareness of the applications of information technology in a wide variety of educational contexts; and
- develop research expertise and potential in the use and application of information technology for teaching and learning purposes.

Candidates for the program will have attained, prior to acceptance, some fundamental knowledge and skills with respect to information technology through pre-requisite 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 candidates to build on their prior experience through the development of pedagogical links and information 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 candidate.

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.

1. Admission Requirements

In addition to meeting the requirements in the School of Graduate Studies General Regulations, Faculty of Education, Memorial University of Newfoundland, candidates must have successfully completed:

a. one of a diploma or certificate in information technology from an accredited institution; CBU EDU 530; Memorial University of Newfoundland E2751 and E3751; or equivalent as determined by the program steering committee.

2. Program Requirements

a. all candidates for the Master of Education (Information Technology) must complete E6100 Research Designs and Methods in Education.

b. candidates 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 Computing

nine credit hours selected from the core elective CBU courses approved for this program:
- CBU EDU 531 Assessment of Software and Information Technology Applications for Education
- CBU EDU 533 Integration of Instructional Design and Information Technology
- CBU EDU 535 Applications of Learning Theory in Educational Multi-media Design
- CBU EDU 537 Designing Web-based Learning
- CBU EDU 539 Technology Planning for Educational Environments
- CBU EDU 541 Information Management for Educational Environments

three credit hours from: 6822, 6823, 6802, E6426, or from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate for each candidate's program and approved by the program steering committee.

c. candidates on the comprehensive-course route must complete:

i. six credit hours selected from E6610, E6615, E6620 listed in 2. b. above

ii. twelve credit hours selected from CBU EDU 531, EDU 533, EDU 535, EDU 537, EDU 539, EDU 541 listed in 2. b. above

iii. E6590 Research and Development Seminar in Information Technology in Education

iv. three credit hours from E6822, E6823, E6802, E6426, or from other Memorial University of Newfoundland, Faculty of Education graduate course offerings as deemed appropriate for each candidate's program and approved by the program steering committee

v. additional credit hours appropriate to a candidate'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

d. normally, candidates will be permitted to register for E6590 only after all other course requirements have been met.

e. candidates who have successfully completed the CBU graduate level Certificate in Education (Technology) will be given advanced standing credit for the 9 CBU EDU course credit requirements for the thesis route or 12 CBU EDU course credit requirements for the comprehensive course-route on this program.

f. candidates who have successfully completed the former CBU EDU 534 and/or EDU 543 with at least a CBU grade of B (70%) toward the CBU graduate level Certificate in Education (Technology) prior to September 2000, will receive up to 12 advanced standing credit hours appropriate to their Degree option (EDU 534 will be considered equivalent to EDU 531 and EDU 533, and EDU 543 equivalent to EDU 535 and EDU 537).

g. thesis-route candidates 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.

10.9 Courses

A selection of the following graduate courses shall be offered to meet the requirements of candidates, as far as the resources of the Faculty allow:

- 6100 Research Designs and Methods in Education
- 6105 Social and Cultural Difference and Education
- 6106 Reading and Teaching Popular Culture
- 6107 Arts Education: Creativity in the Classroom
- 6108 Literacy and Language Education
- 6202 Social Context of Educational Leadership
- 6203 Leadership: Theory and Practice
- 6204 Educational Administration: Theory and Practice
- 6205 Educational Policy: Theory and Practice
- 6209 Research and Development Seminar in Educational Leadership Studies
- 6210 Internship in Educational Leadership Studies (6 credit hours)
- 6202 Project in Educational Leadership Studies (6 credit hours)
- 6230 Teaching and Learning
- 6231 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
550 School of Graduate Studies 2010-2011

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
6446 School Violence: Leadership and Policy Implications
6446 Qualitative Research Methods
6447 Quantitative Research Methods
6448 Critical Approaches to Educational Research
6449 Theoretical and Methodological Foundations of Action 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 (Prerequisite: 6620)
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
6635 Teaching and Learning Geometry
6636 Teaching and Learning the Concept of Number and Operations
6639 Technology and the Teaching and Learning of Mathematics
6641 Writing in the Primary, Elementary and Secondary Schools
6642 Developmental Reading (K-8)
6643 Contemporary Issues in Secondary English
6644 Drama in the Secondary School
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)
6675 Current Issues in Rural Education
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
6703 Personal and Professional Development Group (non-credit)
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
11 Regulations Governing the Degree of Master of Employment Relations

Professor and Director

T. Brown

The Master of Employment Relations (M.E.R.) is a multi-disciplinary 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 33 credit hours of course work, including a major supervised employment relationship.

The following regulations must be read in conjunction with the General Regulations of the School of Graduate Studies of Memorial University of Newfoundland.

11.1 Administration

1. The program shall be administered by a Director, who shall be appointed by the Dean of Graduate Studies on the recommendation of the Deans of Arts and Business Administration. In making this recommendation, the Deans of Arts and Business Administration shall consult with the employment relations community both within and outside the University.

2. The Director shall be responsible to a Graduate Committee in Employment Relations (GCER) for the purposes of administering the program. The GCER shall consists of five 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, and two faculty members from each of the Faculties of Arts and Business Administration.

3. An Advisory Board in Employment Relations (ABER) shall be established for the purposes of consulting with and 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.

11.2 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, with a minimum B standing, from an institution recognized by Senate; and
   b. An undergraduate course in organizational behaviour and microeconomics, from an institution recognized by Senate, with a minimum B standing in each course.

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, 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 and microeconomics, from an institution recognized by Senate, with a minimum B standing 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 an acceptable score and/or additional undergraduate courses before being considered for admission.

4. Applicants are strongly encouraged to complete an introductory course in statistics prior to admission.

11.3 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 no later than August 15 for applicants wishing to enter full-time or 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.

11.4 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 three 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 employment relations.
   b. Two copies of the M.E.R. Employment Experience Information Form.
   c. Two 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
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.

11.5 Program of Study

1. The M.E.R. program consists of 33 credit hours of course work as specified in Table I. These include 27 credit hours of compulsory courses and 6 credit hours of elective courses. The compulsory courses are comprised of 18 credit hours of core courses specified in Table II 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. Electives allow students to specialize in one or more of the three main areas of study. Electives must be chosen from the list of approved electives specified in Table III. Other courses may be approved and added to Table III from time to time by the GCER.

4. Candidates are responsible for fulfilling all pre-requisites 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. Candidates enrolled in Research Seminar in Employment Relations will normally have completed an introductory course in statistics. If candidates' records suggest a deficiency in statistics, the GCER reserves the right to require that they complete a foundation course in statistics as part of, and to be completed during, their program.

7. The prerequisites for EMRE 6030 are EMRE 6010 and EMRE 6020. In addition, students will normally complete six M.E.R. courses before registering for EMRE 6030. 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. For the core courses, the prerequisite for BUSI 9329 is BUSI 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.

8. A waiver of a core course may be granted by the Dean of Graduate Studies on the recommendation of the GCER if the candidate 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 candidate, and approved by the GCER. The maximum number of core courses that can be waived is 3 and all replacement courses must be taken during the candidate's period of enrollment in the program.

9. Each student's program of study must be approved by the GCER. The GCER reserves the right to restrict candidates from taking particular courses if it is deemed that those courses do not add sufficient value beyond courses that the candidate has completed at the undergraduate level.

11.6 Evaluation

1. Candidates for the M.E.R. Degree must obtain a grade of B or better in all program courses.

2. Candidates 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 candidate may, on the recommendation of the GCER, 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 candidate's program after which the candidate shall be required to withdraw from the program.

11.7 Courses

The schedule of courses for the M.E.R. program is as follows:

Table I - Master of Employment Relations Schedule of Courses

<table>
<thead>
<tr>
<th>Term I (Fall)</th>
<th>Term II (Winter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three core courses from Table II</td>
<td>Three core courses from Table II</td>
</tr>
<tr>
<td>One elective from Table III</td>
<td>One elective from Table III</td>
</tr>
<tr>
<td>Employment Relations 6010 Research Seminar in Employment Relations I</td>
<td>Employment Relations 6020 Research Seminar in Employment Relations II</td>
</tr>
<tr>
<td>Employment Relations 6030 Research Seminar in Employment Relations III</td>
<td></td>
</tr>
</tbody>
</table>

Table II - Master of Employment Relations Core Courses

| Business 8204 Human Resource Management | Economics 6030 Labour Market Economics |
| Business 8210 Labour Relations | History 6075 Advanced Studies in Labour and Working-Class |
| Business 9329 Labour Law | History |
| | Sociology 6360 Sociology of Work |
12 Regulations Governing the Degree of Master of Engineering

Professor and Dean, Pro Tempore
J. Quaicoe

Professor and Associate Dean (Graduate Studies)
L. Lye

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, and Oil and Gas Engineering.

12.1 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.

12.2 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 normally consist of:
   a. a thesis related to the area of study
   b. a minimum of 15 credit hours, at least 12 credit hours of which must be from graduate courses. Three credit hours may be taken from undergraduate courses approved for the student's program by the Dean of Graduate Studies on the recommendation of the Faculty of Engineering and Applied Science
   c. Seminar course 9100
   d. such other courses as may be required in an individual's program.

   For students enrolled in the Computer Engineering, Electrical Engineering, Mechanical Engineering, Ocean and Naval Architectural Engineering disciplines, or Oil and Gas Engineering, a program shall normally include at least 9 credit hours from courses chosen from the core courses listed below.

   3. The following are core courses:
      ENG. 9002, 9015, 9110, 9113, 9114, 9115, 9210, 9411, 9420, 9501, 9505, 9516, 9520, 9550, 9609, 9627, 9816, 9821, 9826, 9827, 9834, 9847, 9861, 9865, 9867, 9871, 9874, 9876, 9901, 9902, 9940.

   4. The thesis is to contain the results of a systematic investigation which has been conducted by the candidate under the direction of the Supervisor.

   5. 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.

12.3 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.

12.4 Industrial Internship Option

The Faculty encourages graduate students to undertake internships 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 M.Eng. 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 registered in the option must satisfy the degree regulations for an M.Eng. program. In addition, students in the Industrial Internship Option:

- 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
- shall normally spend 8 to 12 months of their program at an internship in industry
- shall normally spend at least two semesters on campus on a full-time basis as a graduate student at this university
- shall submit a concise progress report to their supervisors, no later than the end of each semester while on an internship

12.5 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 during 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 of Fees and Charges (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.

12.6 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, he/she may be required to withdraw from the program.

12.7 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 candidate.

4. 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.

12.8 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.

12.9 Recommendation for Awarding Degree

When a student has completed all the requirements for the 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.
12.10 Master of Applied Science Programs
The Faculty of Engineering and Applied Science offers the following course-based programs:

12.10.1 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.

12.10.2 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.

12.10.3 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.

12.11 Master of Engineering Management

12.11.1 Engineering Management
See regulations governing the Degree of Master of Engineering Management.

12.12 Courses
A selection of the following graduate courses will be offered to meet the requirements of the candidates, as far as the resources of the Faculty will allow.

Required Courses:
9100 Engineering Graduate Seminar (1 credit hour)

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
9411 Probabilistic Methods in Engineering
9420 Engineering Analysis
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
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
9901 Fundamentals of Fluid Dynamics
9902 Advanced Transport Phenomena
9940 Advanced Robotics

Other Courses:
9022 Marine Geotechnical Engineering
9052 Ice Properties and Mechanics
9090/99 Special Topics in Ocean 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
9210 Advanced Engineering Materials
13 Regulations Governing the Degree of Master of Engineering Management

13.1 Program of Study
1. The Faculty of Engineering and Applied Science in collaboration with the Faculty of Business Administration offers a program in Engineering Management leading to the degree of Master of Engineering Management (M.E.M.). 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 the Faculty of Business Administration and will be administered by a Board of Studies appointed jointly by the Dean of Engineering and Applied Science and the Dean of Business Administration.

13.2 Qualifications for Admission
1. Admission to the program is limited and competitive.
2. To be eligible for consideration for admission, an applicant shall meet the requirements set out in General Regulations - Qualifications for Admission, Master's Program 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.
3. To be eligible for consideration for admission, applicants will meet the English Proficiency Requirements described under General Regulations - Qualifications for Admission, English Proficiency Requirements.
4. Applicants will normally be interviewed by representatives of the Board of Studies as part of the admission process.
13.3 Degree Requirements
The degree program requires the completion of 36 credit hours, 6 of which comprise a project course.

1. Students are normally required to complete Engineering 9395, 9396, and 9397, along with 9 additional credit hours from the Master of Engineering, Core Courses or the Master of Engineering, Other Courses offered for the Master of Engineering program, from which up to 3 credit hours may be taken from undergraduate courses approved for the student's program by the Dean of Graduate Studies on the recommendation of the Faculty of Engineering and Applied Science.

2. Students are normally required to complete Business 8104, 8106, 8109, 8206 and one of the following courses: Business 8103, 8107, 8108, 8204, 8205, 8207, or 8209.

3. Students who have not successfully completed a baccalaureate degree from a recognized university where English is the language of instruction will be required to complete an 8-week English as Second Language course prior to the start of the first regular academic semester and a one semester course covering the Engineering Profession and Communications during the second academic semester.

13.4 Courses
Business 8103 Statistical Applications in Management
Business 8104 Organizations: Behaviour and Structure
Business 8106 Marketing
Business 8107 Managing Ethics and Responsibility
Business 8108 Economics for Business
Business 8109 Accounting for Management
Business 8204 Human Resource Management
Business 8205 Information Systems
Business 8206 Managerial Finance
Business 8207 Operations Management
Business 8209 Leadership and Interpersonal Skills for Managers
Engineering 9395 Engineering Management Project (6 credit hours)
Engineering 9396 Engineering Management Topics
Engineering 9397 Advanced Modelling and Quality Management

13.5 Industrial Internship Option
The Faculty permits graduates 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.E.M. 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.E.M. 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.

Successful completion of an internship will be indicated by a descriptive notation on the student transcript.

14 Regulations Governing the Degree of Master of Environmental Science
(see also Master of Science in Environmental Science)

Board of Studies
Dr. J. Wroblewski, Ocean Sciences Centre - Chair
Dr. C. Campbell, Sir Wilfred Grenfell College
Dr. B. Chen, Faculty of Engineering and Applied Science
Dr. R. Chuenpagdee, Department of Geography
Dr. P. Marino, Head, Department of Biology
Dr. W. Montevecchi, Department of Psychology
Dr. L. Tarasov, Department of Physics and Physical Oceanography
Dr. S. Ziegler, Department of Earth Sciences

14.1 Program of Study
1. The Environmental Science Program is an interdisciplinary graduate program involving the departments of the Faculty of Science, the Department of Geography, and the Faculty of Engineering and Applied Science of Memorial University of Newfoundland. 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. Admission is open to students with appropriate Science, Geography or Engineering backgrounds.

2. The program is administered by a Board of Studies appointed by the Dean of Science.

14.2 Qualifications for Admission
Admission is limited and competitive. To be considered for admission applicants shall normally hold an Honours degree in Science or Geography 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
14.3 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.

14.3.1 Master of Environmental Science
1. The Master of Environmental Science is a multidisciplinary course-based degree, focused on environmental issues. The Degree program provides for both multidisciplinary courses and for courses focused on the student's specific area of interest.
2. The Degree program requires completion of 27 credit hours.
   a. Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be ENVE/ENVS 6000, ENVS 6009 and ENVS 6010 and 6 credit hours from ENVE/ENVS 6001, 6002 and 6003.
   b. Students will be required to take a minimum of 12 credit hours in elective courses approved by the Board of Studies, 9 credit hours of which will normally be selected from graduate courses offered by the Faculties of Science and Engineering and Applied Science. Students are advised to consult with instructors and Faculties regarding necessary prerequisites and availability.

14.3.2 Master of Science (Environmental Science)
1. 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, and will be supervised by appropriate faculty, normally in the Faculties of Science and/or Engineering and Applied Science. The course component has two aims: to broaden the students' understanding of environmental issues; and to provide further training in areas of research specialization for the thesis.
2. 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.
3. The program of each student will consist of a minimum of 15 credit hours in program courses which will include ENVE/ENVS 6000 and ENVS 6010. Of the 9 credit hours remaining in program courses, 3 credit hours will be from ENVE/ENVS 6001, 6002 and 6003 and the other credit hours will be related to the student's specialty and will normally be chosen from graduate courses offered by the Faculties of Science, and Engineering and Applied Science.
4. 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 Regulation Theses and Reports.

14.4 Courses
ENVE/ENVS 6000 Environmental Science and Technology
ENVE/ENVS 6001 Earth and Ocean Systems
ENVE/ENVS 6002 Environmental Chemistry and Toxicology
ENVE/ENVS 6003 Applied Ecology
ENVS 6004 Environmental Pollution and Mitigation (cross-listed as Eng 9601)
ENVS 6005 Environmental Sampling and Pollutant Analysis (cross-listed as Eng 9603)
ENVS 6007 Environmental Risk Assessment (same as Eng 9609)
ENVS 6008 Air Pollution (same as Eng 9624)
ENVS 6009 Environmental Science Project
ENVS 6010 Environmental Seminar
ENVS 6201-6210 Special Topics in Environmental Science

15 Regulations Governing the Degree of Master of Marine Studies
(Fisheries Resource Management)

Executive Director
G. Blackwood

Academic Director
P. Fisher

15.1 Administration
The programs will be administered by an Academic Director appointed by the Executive Director of the Fisheries and 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 Executive Director of the Fisheries and Marine Institute. This committee 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.

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. Members of this Committee will be appointed by the Dean of Graduate Studies on recommendation of the Executive Director of the Fisheries and 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.

15.2 Programs
There are two graduate programs in Fisheries Resource Management: the Graduate Diploma and the Master of Marine Studies. The Master's Degree requires successful completion of 8 courses plus a major report. The Graduate Diploma requires completion of 6 courses. The programs are aimed at professionals working in or intending to enter careers in fisheries management.

15.3 Graduate Diploma
The Graduate Diploma in Fisheries Resource Management provides an opportunity for fisheries professionals to enhance their
perspective on fishery issues from a variety of disciplines.

1. Admission Requirements
   To be admitted to the Graduate Diploma in Fisheries Resource Management, a student must be eligible to register in the Master of Marine Studies program (see Master of Marine Studies, Admission Requirements below).

2. Program of Study
   The program consists of 18 credit hours. Students must complete 6001 plus five other courses chosen from 6002, 6003, 6004, 6005, 6006 and 6007.

3. Evaluation
   Candidates for the Graduate Diploma in Fisheries Resource Management must obtain a grade of B or better in all program courses.

15.4 Master of Marine Studies

The Degree of Master of Marine Studies (Fisheries Resource Management) (M.M.S.) is a multi-disciplinary program of study that will provide the candidate with exposure to all dimensions of modern fisheries resource management. The program is aimed at professionals working in or intending to enter careers in fisheries management and is available on a full-time or part-time basis. All candidates must take the full complement of 24 credit hours, including a required seminar, plus a major report. Candidates registered on a full-time basis may complete the program in one academic year. Students who have successfully completed the requirements for the Graduate Diploma may elect to continue their program of study in order to earn the Degree.

1. Admission Requirements
   a. 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.
   b. In addition to the academic requirements in a. 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 self-employment or consulting activities related to fisheries.
   c. Applicants must submit, along with the normal academic application form, a letter outlining their reasons for applying for admission to the program, their expectations of the program and its anticipated impact on their work and career progression.
   d. In exceptional cases, persons who do not meet the requirements specified in a. but who have a significant connection to fisheries and demonstrated equivalent experience acceptable to the Academic Advisory Committee may be admitted. Such persons will undergo an interview by the Academic Advisory Committee before being admitted.
   e. Applications for admission in September must be received no later than April 30 of the year in which admission is sought.

2. Program of Study
   a. The program consists of 24 credit hours made up of the courses numbered 6001-6008 listed below, plus a major report. Courses will normally be offered only once in an academic year with four courses offered in the Fall semester and four, including the Seminar course offered in the Winter. Full-time candidates are expected to undertake and complete the work required for the report during the Spring semester.
   b. A waiver of a program course may be granted by the Dean of Graduate Studies on the recommendation of the Academic Advisory Committee if the candidate can demonstrate to the Academic Advisory Committee that the course material has been substantially covered by a course taken at this or another recognized university. In such cases the course must be replaced by another course approved by the Academic Advisory Committee. This replacement course must be taken during the candidate's period of enrolment in the program.

3. Evaluation
   a. Candidates for the Master's Degree must obtain a grade of B or better in all program courses and successfully complete the seminar.
   b. Candidates 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 candidate may, on the recommendation of the Academic Advisory Committee, substitute another graduate course. Only one such repeat or substitution will be permitted in the program.
   c. The major report is a fundamental component of the program and will normally be undertaken in the final semester of the program. The topic of the report and a faculty Supervisor will be chosen by the candidate in consultation with the Academic Advisory Committee. The report provides an opportunity to synthesise 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 Regulation Theses and Reports of the School of Graduate Studies.

15.5 Courses

6001 Fisheries Ecology
6002 Quantitative Methods in Fisheries
6003 Fisheries Economics
6004 Fisheries Policy
6005 Fisheries Planning and Development
6006 Business Management for Fisheries
6007 Evolution of Fisheries
6008 Seminar in Fisheries Management

16 Regulations Governing the Degree of Master of Music

Professor and Director
E. Waterman
Associate Professor and Associate Director
M. Cheramy

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: Conducting, Performance and Performance/pedagogy. The specialization of Ethnomusicology is available through the degrees Master of Arts and Doctor of Philosophy. See the section Regulations Governing the Degree of Master of Arts and the section Regulations Governing the Degree of Doctor of Philosophy, respectively.
Within the three broad areas of specialization offered for the M.Mus., there is considerable flexibility available to further focus the program to meet specific interests and needs. These programs offer the musician the tools to make accelerated advances in comprehension, skills and abilities as a performing musician or conductor while offering at the same time, insights and experience into the métier of the musician/entrepreneur in the modern world. 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.

Graduate instruction is offered in instrumental and choral conducting, as well as in the following performance media: voice, piano, organ, flute, clarinet, saxophone, oboe, bassoon, trumpet, euphonium, trombone, tuba, percussion, guitar, violin, viola, cello and double bass.

16.1 Qualifications for Admission

1. Admission regulations and procedures are outlined in the General Regulations Governing the School of Graduate Studies and apply to the Master of Music Degree. Candidates for admission will normally hold a Bachelor of Music Degree with first-class standing from a recognized university. Applicants with other types of preparation should enquire with the School of Music regarding the likelihood of admission. Entrance auditions are normally held in late February or early March.

2. In addition to meeting the requirements above, admission is further determined by audition and diagnostic examinations.

   a. Auditions for September entry will be held in February of each year on the St. John’s campus. Where exceptional circumstances prevail and with the approval of the Director, the audition may be submitted as an audio or video recording. The audition program should display a range of performance styles and repertoire. Prospective Candidates should contact the School of Music for details on length of audition and appropriate repertoire. Applicants to the M.Mus. in Conducting program 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.

   b. Candidates for admission will be required to write diagnostic examinations measuring their skills and knowledge in the standard areas of musical literacy. These include music theory and analysis, aural skills, and music history and literature which includes repertoire knowledge in the performance area. Candidates who display deficiencies in any of these areas may still be considered for admission. Once admitted, however, they will be required to take remedial course work in addition to the required program.

2. All candidates for the M.Mus. Degree must complete 36 credit hours which include MU 6001 and MU 6002.

   a. All candidates in Conducting (Choral Conducting, Instrumental Conducting or Choral/Instrumental Conducting) must also complete the following courses: 6210, 6310, 6100; one of 6006, 6007 or 6008; and a total of six credits chosen from 6211, 7210, 6212, 6213, 6311, 7310, 6312 or 6313. Of the remaining 12 credit hours in electives, and with the approval of the Associate Director for Graduate Studies in the School of Music, 3 credit hours may be from related disciplines.

   b. All candidates in Performance (solo voice, instrument or chamber music) must also complete 645A/B, 745A/B; 6700, 6750; 6005 or 6009; and 4 credits chosen from 646A/B or 6500-6503. Of the remaining 6 credit hours in electives, and with the approval of the Associate Director for Graduate Studies in the School of Music, 3 credit hours may be from related disciplines.

   c. All candidates in Performance/Pedagogy (solo voice or instrument) must also complete 647A/B, 747A/B, 6400, 6600, 6650 and 4 credits chosen from 646A/B or 6500-6503. Of the remaining 6 credit hours in electives, and with the approval of the Associate Director for Graduate Studies in the School of Music, 3 credit hours may be from related disciplines.

   d. Further courses may be required depending on the background of the individual student.

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<tr>
<th>Master of Music</th>
<th>Conducting</th>
<th>Performance</th>
<th>Performance/Pedagogy</th>
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<td>Electives</td>
<td>Twelve credit hours, of which 3 may be from related disciplines</td>
<td>6 credit hours, of which 3 credit hours may be from related disciplines</td>
<td>6 credit hours, of which 3 credit hours may be from related disciplines</td>
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16.3 Evaluation

The General Regulations on evaluation, continuance and termination of studies of the School of Graduate Studies pertain to the Master of Music Degree. In addition, failure to receive a grade of 75% or higher in any of Music 645A/B, Music 745A/B, Music 647A/B, Music 747A/B, Music 6211, Music 6311, Music 7210 or Music 7310 will lead to termination of the student’s program.
16.4 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the School will allow.

Core courses
6001 Research Methods
6002 Graduate Seminar

Applied courses
6210 Instrumental Conducting I
6211 Instrumental Conducting II
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
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)
645A/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)
6510 Seminar in Performance Issues
6651 Pedagogy Internship II (2 credit hours)
7210 Instrumental Conducting III
7310 Choral Conducting III
745A/B Principal Applied Study II (6 credit hours)
747A/B Principal Applied Study II (6 credit hours)

Complementary courses and electives
6005 Performance Practice
6006 Instrumental Ensemble Repertoire
6007 Choral Repertoire
6008 Orchestral Repertoire
6009 Music Literature
6100 Score Study and Analysis
6600 Pedagogy Seminar
6650 Pedagogy Internship I (2 credit hours)
6700 Music Industries Seminar
6750 Music Industries Internship (2 credit hours)

Special Topics Courses
6800-6809
6900-6909
7800-7809

17 Regulations Governing the Degree of Master of Nursing

Professor and Director
J. McFetridge-Durdle

Professor and Associate Director (Graduate Program and Research)
S. Solberg

17.1 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 School of Nursing offers a Master of Nursing (M.N.) program with three options: (thesis, non-thesis and nurse practitioner) as well as a Post Masters Nurse Practitioner Graduate Diploma.

17.2 Qualifications for Admission
1. Applicants to the Master of Nursing program in any of the three 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 School 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’s experience in nursing practice, and to have completed an undergraduate nursing research course, and a statistics course normally within the last 5 years such as Statistics 2500 or Education 2900 or their equivalents.
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, candidates seeking admission to the MN-Nurse Practitioner Degree option must have two years of clinical experience preferably in their chosen specialty area. As well, candidates must have a letter from a health care
6. In addition to requirements 1 and 4, candidates seeking admission to the Post Masters Nurse Practitioner Graduate Diploma program must have completed a Masters Degree in Nursing or an equivalent degree with a nursing focus and have two years of clinical nursing experience preferably in their chosen specialty area. As well, candidates must have a letter from a health care agency and clinical preceptor guaranteeing the candidate a preceptored clinical placement for the final semester of their program.

7. Only in exceptional circumstances and only on the recommendation of the School of Nursing shall the Dean of Graduate Studies consider applicants who do not meet admission requirements listed above.

17.3 Registration
See School of Graduate Studies General Regulations, Registration.

17.4 Programs of Study
There are three routes offered that lead to a Master of Nursing Degree: 1. Thesis option, 2. Non-thesis option, and 3. 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 School of Nursing also offers a Post Masters Nurse Practitioner Graduate Diploma.

17.4.1 Thesis Option
1. Candidates must complete an approved program of study consisting of a minimum of 19 credit hours in graduate program courses and a thesis.
   
   Required courses:
   - 6010 Research in Nursing I: Quantitative Methods
   - 6011 Philosophical and Theoretical Foundations of Nursing
   - 6100 Research in Nursing II: Qualitative Methods
   - Either 6200 Nursing Individuals and Families through Life Transitions, and N6210 Nursing Therapeutics for Individuals and Families
   - OR 6220 Concepts for Population-based Nursing, and 6230 Interventions for Population-based Nursing
   - One nursing elective

2. Candidates shall submit a thesis on an approved subject in which systematic research has been conducted under the direction of a Supervisor recommended by the Director and approved by the Dean.

3. The program of each candidate shall be approved by the Dean on the recommendation of the Director.

17.4.2 Non-Thesis Option
1. Candidates must complete an approved program of study consisting of a minimum of 28 credit hours in graduate program courses and 6 credit hours in a consolidated practicum.

   Required courses:
   - 6010 Research in Nursing I: Quantitative Methods
   - 6011 Philosophical and Theoretical Foundations of Nursing
   - 6100 Research in Nursing II: Qualitative Methods
   - 6040 Nursing Informatics
   - Either 6200 Nursing Individuals and Families through Life Transitions and 6210 Nursing Therapeutics for Individuals and Families
   - OR 6220 Concepts for Population-based Nursing, and 6230 Interventions for Population-based Nursing
   - Three of the following courses:
     - 6020 Program Development in Nursing
     - 6031 Education in Nursing
     - 6050 Leadership in Nursing
     - 6060 Policy and Politics in Nursing and Health Care
     - Other approved electives
   - One of the following consolidated practicums:
     - 6610, 6611 Practicum in Advanced Clinical Practice
     - 6620, 6621 Practicum in Nursing Administration
     - 6630, 6631 Practicum in Nursing Research/Research Utilization
     - 6640, 6641 Practicum in Health Policy
     - 6650, 6651 Practicum in Nursing Education
     - The consolidated practicum will normally consist of 300 hours of field experience.

2. The program of each candidate shall be approved by the Dean on the recommendation of the Director.

17.4.3 Nurse Practitioner Option
1. Candidates must complete an approved program of studies consisting of a minimum of 32 credit hours in graduate program courses and an integrated clinical practice experience, comprising 15 credit hours.

   Required courses:
   - 6010 Research in Nursing I: Quantitative Methods
   - 6011 Philosophical and Theoretical Foundations of Nursing
   - 6100 Research in Nursing II: Qualitative Methods
   - 6020 Program Development in Nursing
   - 6200 Nursing Individuals and Families through Life Transitions and 6210 Nursing Therapeutics for Individuals and Families
   - 6700 Clinical Decision Making (6 credit hours)
   - 6701 Advanced Practice Issues and Role Development (2 credit hours)
   - 6702 Advanced Clinical Practicum I (96 hours of clinical practice in various health care settings) (3 credit hours)
   - One of: 6800 to 6809 Nursing Specialty Option Courses (3 credit hours)
   - 690X Advanced Clinical Practicum II (The integrated practice component will normally consist of a minimum of 500 hours of preceptored specialty clinical practice and biweekly seminars) (15 credit hours)

2. The program of each candidate shall be approved by the Dean on the recommendation of the Director.
17.4.4 Post Masters Nurse Practitioner Graduate Diploma

1. Candidates 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 14 credit hours in graduate program courses and integrated clinical practice experience, comprising 15 credit hours.

   **Required courses:**
   6700 Clinical Decision Making (6 credit hours)
   6701 Advanced Practice Issues and Role Development (2 credit hours)
   6702 Advanced Clinical Practicum I (96 hours of clinical practice in various health care settings) (3 credit hours)
   One of: 6800 to 6809 Nursing Specialty Option Courses (3 credit hours)
   690X Advanced Clinical Practicum II (The integrated practice component will normally consist of a minimum of 500 hours of preceptored specialty clinical practice and biweekly seminars) (15 credit hours)

2. Programs for some candidates may exceed the above minimum requirements.

3. The program for each candidate shall be approved by the Dean on the recommendation of the Director.

17.5 Evaluation

1. In order to continue in graduate studies and in order to qualify for a Master's Degree, a candidate shall obtain an A or B grade in each program course.

2. If the candidate is in the Non-thesis Option, the candidate must obtain a Pass grade for the practicum component of the program.

3. When the Director of the School of Nursing has determined on the basis of consultation with the candidate, the Associate Director, Graduate Program and Research, and the thesis or practicum Supervisor, that a candidate has fallen below a satisfactory level, the Director may recommend to the Dean that such a candidate be required to withdraw from the program.

4. To remain in good standing candidates are required to maintain professional behaviour consistent with the current Code of Ethics of the Canadian Nurses Association and, when applicable, the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. Candidates who fail to meet this requirement will be required to withdraw from the School of Nursing upon recommendation of the Graduate Studies Committee.

17.6 Thesis

See School of Graduate Studies General Regulations, Theses and Reports.

Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates as far as the resources of the School of Nursing will allow:

- 6010 Research in Nursing I: Quantitative Methods (4 credit hours)
- 6011 Philosophical and Theoretical Foundations of Nursing (3 credit hours)
- 6020 Program Development in Nursing (3 credits hours) (Pre or co-requisite: 6011)
- 6031 Education in Nursing (3 credit hours) (Not required by students who have completed 6030. Credit may not be obtained for both 6030 and 6031)
- 6040 Nursing Informatics (3 credit hours)
- 6050 Leadership in Nursing (3 credit hours)
- 6060 Policy and Politics in Nursing and Health Care (3 credit hours)
- 6100 Research in Nursing II: Quantitative Methods (3 credit hours)
- 6200 Nursing Individuals and Families through Life Transitions (3 credit hours) Pre or co-requisite: 6011 (Not required by students who have completed 6400)
- 6210 Nursing Therapeutics for Individuals and Families (3 credit hours) Pre or co-requisite: 6200 (Not required by students who have completed 6400)
- 6220 Concepts for Population-based Nursing (3 credit hours) Prerequisites: 6011 (Not required by students who have completed 6410)
- 6230 Interventions for Population-based Nursing (3 credit hours) Pre or co-requisite: 6220 (Not required by students who have completed 6410)
- 6310-6350 Special Topics in Nursing (electives)
- 6501-10 Individual Readings and Research in Special Areas
- 6610-6611 Practicum in Advanced Clinical Practice (6 credit hours) (Prerequisites: All required and elective courses including 6020 and 6050)
- 6620-6621 Practicum in Nursing Administration (6 credit hours) (Prerequisites: All required and elective courses including 6050 and 6060)
- 6630-6631 Practicum in Nursing Research/Research Utilization (6 credit hours) (Prerequisites: All required and elective courses including 6060)
- 6640-6641 Practicum in Health Policy (6 credit hours) (Prerequisites: All required and elective courses including 6050 and 6060)
- 6650-6651 Practicum in Nursing Education (6 credit hours) (Prerequisites: All required and elective courses including 6020 and 6031)
- 6700 Clinical Decision Making (6 credit hours)
- 6701 Advanced Practice Issues and Role Development (2 credit hours)
- 6702 Advanced Clinical Practicum I (96 hours of clinical practice in various health care settings) (3 credit hours)
- One of: 6800 to 6809 Nursing Specialty Option Courses (3 credit hours)
- 690X Advanced Clinical Practicum II (The integrated practice component will normally consist of a minimum of 500 hours of preceptored specialty clinical practice and biweekly seminars) (15 credit hours)

18 Regulations Governing the Degree of Master of Philosophy

Programs leading to the Degree of Master of Philosophy (M.Phil.) are offered at present in German Language and Literature, Humanities, and in Sociology.

18.1 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 his or her proposed field of specialization satisfactory to the Department(s) concerned when interdisciplinary study is intended or to the Board 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 or Board of Studies 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 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 Department(s), or Board of Studies.

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.

18.2 Program of Study

1. Every candidate 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 Department(s) or Board of Studies, and approved by the Dean.

2. A candidate may be required also to take additional credit hours in program courses, which must be recommended by the Department(s) or Board of Studies, 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 candidate while classified as a part-time student may take more than 6 credit hours in any one semester.

5. No candidate 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 candidate shall be assigned to a tutor recommended by the Department(s) or Board of Studies and approved by the Dean.

8. The Dean may approve an application to transfer from the M.Phil. to the M.A. only when a new integrated program, acceptable to the Dean, is submitted.

18.3 Period of Study

The period of study for the Master of Philosophy Degree shall not normally exceed three years, during which time the candidate shall spend at least two semesters in full-time attendance as a graduate student at this University.

18.4 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 candidate 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 Department(s) or Board of Studies, shall determine the times and places for general examinations; and, on the recommendation of the Department(s) or Board of Studies, 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.

18.5 Evaluation - General Comprehensive Examination

1. Each candidate must pass a general comprehensive examination.

2. The examination committee shall be appointed by the Dean on the recommendation of the Department(s) or Board of Studies. The committee shall consist of either three or five members, at least one of whom must come from outside the Department(s) concerned. The candidate shall be informed of the names of the committee well before the examination.

3. The candidate and the tutor will normally agree when the candidate may sit the general comprehensive examination. However, the Department(s) or Board of Studies must accede to the candidate's request to sit a comprehensive examination, except that in no circumstances may a candidate attempt the general comprehensive examination before his or her course program is completed.

4. The schedule for the examination shall be agreed by the candidate, the tutor, and the examining committee, and shall be promulgated 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 to the examining committee and to members of the Department(s) or Board of Studies only.

7. A candidate 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.

18.6 Departmental Regulations

Every candidate in a graduate program shall comply with any additional program requirements and with the General Regulations.
18.7 German

Associate Professor and Head of the Department
E. Warkentin

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. No graduate work is offered in Russian at this time.

1. In addition to the general requirements, candidates 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 candidates 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.

18.7.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

- 6000 German Civilization I
- 6001 German Civilization II
- 6100 History of the German Language I
- 6101 History of the German Language II
- 6200 Medieval German Literature I
- 6201 Medieval German Literature II
- 6300 German Literature, 1500-1700 I
- 6301 German Literature, 1500-1700 II
- 6400 German Literature of the Enlightenment and Storm and Stress I
- 6401 German Literature of the Enlightenment and Storm and Stress II
- 6500 German Classicism I
- 6501 German Classicism II
- 6600 German Romanticism I
- 6601 German Romanticism II
- 6700 German Realism I
- 6701 German Realism II
- 6800 German Literature, 1880-1933 I
- 6801 German Literature, 1880-1933 II
- 6900 Contemporary German Literature I
- 6901 Contemporary German Literature II
- 7000 Special Subject or Author I
- 7001 Special Subject or Author II
- 7002-7020 Special Topics in German Studies

Deutsch

Professor und Vorstand der Abteilung
E. Warkentin


Kurse

Von den hier aufgeführten Kursen für Graduierte wird jeweils eine Auswahl angeboten, die sowohl den Anforderungen des Studierenden wie den Möglichkeiten der Abteilung gerecht wird.

- 6000 Deutsche Kulturkunde I
- 6001 Deutsche Kulturkunde II
- 6100 Geschichte der deutschen Sprache I
- 6101 Geschichte der deutschen Sprache II
- 6200 Mittelhochdeutsche Literatur I
- 6201 Mittelhochdeutsche Literatur II
- 6300 Deutsche Literatur 1500-1700 I
- 6301 Deutsche Literatur 1500-1700 II
- 6400 Deutsche Literatur der Aufklärung und des Sturm und Drang I
- 6401 Deutsche Literatur der Aufklärung und des Sturm und Drang II
- 6500 Deutsche Klassik I
- 6501 Deutsche Klassik II
- 6600 Deutsche Romantik I
- 6601 Deutsche Romantik II
- 6700 Deutscher Realismus I
- 6701 Deutscher Realismus II
- 6800 Deutsche Literatur 1880-1933 I
- 6801 Deutsche Literatur 1880-1933 II
- 6900 Deutsche Gegenwartsliteratur I
- 6901 Deutsche Gegenwartsliteratur II
- 7000 Wahlthema oder-Autor I
- 7001 Wahlthema oder-Autor II
- 7002-7020 Wahlthemen in German Studies
18.8 Humanities

Assistant Professor and Director, Board of Studies

J. Dyer

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 Board of Studies with membership appointed by the Dean of Arts, chosen from the participating faculty.

Master of Philosophy

In addition to meeting these regulations students must also meet the General Regulations Governing the Degree of Master of Philosophy.

This program is offered by the Faculty of Arts, and will draw scholarly participation chosen from those appropriately qualified faculty members wishing to participate, regardless of Department or Faculty affiliation.

18.8.1 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 Board 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 in consultation with the Board of Studies. Candidates will be required to complete such designated pre-admission courses with a minimum overall average of 70%.

18.8.2 Administration

1. The program will be administered by a Board of Studies, the members of which will be appointed by the Dean of Arts chosen from the participating faculty.

2. There will be a Director of Studies who will be an ex officio member of the Board of Studies and 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.

4. The Board of Studies will be empowered to secure external grant funding where appropriate, and to manage all related administrative and financial matters as necessary.

18.8.3 Program of Study

1. Every candidate shall normally read 30 credit hours in the 10 regulation courses listed below.

2. With permission of the Director of Studies, a candidate 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 candidate shall be required to maintain and submit a program Journal which will be monitored and evaluated by the Board of Studies. The Journal will comprise the candidate's critical reflections arising out of analyses of designated key themes common to the several disciplines which constitute the program.

18.8.4 Comprehensive Examination

1. Each candidate must pass a general comprehensive examination.

2. The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Board of Studies. The Committee shall normally consist of three members. One member of the Committee is normally the tutor. The candidate shall be informed of the names of the committee well before the examination.

3. The candidate and the tutor will normally agree when the candidate may sit the general comprehensive examination. However, the Board of Studies must accede to the candidate's request to sit a comprehensive examination, except that in no circumstances may a candidate attempt the general comprehensive examination before his or her course program is completed.

4. The schedule for the examination shall be agreed by the candidate, the tutor, and the Examining Committee, and shall be promulgated 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 candidate 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, members of the Board of Studies and members of the Departments concerned.

8. A candidate 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.

18.8.5 Courses

6000 Speaking and Writing I
18.9 Sociology
Associate Professor and Head of the Department
A. Micucci

Master of Philosophy
1. Minimum admission requirements are a B average in undergraduate studies with a good undergraduate record in Sociology.
2. The Master of Philosophy requires the completion of 30 credit hours including the Graduate Seminar (6880) and Methods (6040). Other courses will be selected in consultation with the Chair of the Department's Graduate Studies Committee.

18.9.1 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:
- 6040 Methods of Sociological Research
- 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 (cross-listed as Women's Studies 6380)
- 6610 Socialization
- 6620 Current Topics in Social Behaviour
- 6880 Sociology Graduate Seminar

19 Regulations Governing the Degree of Master of Physical Education
Associate Professor and Acting Director
A. Card

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.

19.1 Qualifications for Admission
1. Admission is limited and competitive. The deadline for receipt of applications is March 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 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 his/her 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.

19.2 Program of Study and Research
1. The Degree of Master of Physical Education is offered under three options:
   Option I. The program shall consist of a minimum of 15 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 candidate under the direction of the Supervisor.
   Option II. The program shall consist of a minimum of 18 credit hours in graduate courses plus a project report. The project shall be on an approved subject in which action-research has been conducted by the candidate under the direction of the Supervisor.
   Option III. The program shall consist of a minimum of 24 credit hours in graduate courses plus a comprehensive examination in the candidate's major area of study.
2. The candidate'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 I: HKR 6500, one of 6000 or 6001, 6120, plus two of 6003, 6111, 6121, 6122, 6123, 6124, 6125, 6610-6615 (plus thesis)

Option II: HKR 6500, one of 6000 or 6001, 6120, plus 3 of 6003, 6111, 6121, 6122, 6123, 6124, 6125, 6610-6615 (plus project)

Option III: HKR 6500, one of 6000 or 6001, 6120, plus 5 of 6003, 6111, 6121, 6122, 6123, 6124, 6125, 6610-6615 (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. In addition, all on-campus candidates shall be required to complete four semester-length seminar courses (HKR 6510-6513). Off-campus or part-time candidates who cannot attend the on-campus seminar series can substitute 24 hours of participation (over their two year tenure) and present once at national, provincial or regional conferences, workshops, professional development seminars or equivalent activities.

19.3 Evaluation

1. Candidates 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 Director has determined, on the basis of consultation with the candidate and the instructors, that a candidate's work has fallen below a satisfactory level, he or she may recommend to the Dean of Graduate Studies that the candidate be required to withdraw from the program.

19.4 Thesis and Project Report

1. Evaluation of the thesis or project report shall be governed by Graduate Studies General Regulation Theses and Reports. The thesis or project report shall normally be evaluated by two examiners approved by the Dean.

2. When the thesis or project report has been completed to the satisfaction of the Dean, the Dean shall recommend that the candidate be awarded the degree.

19.5 Comprehensive Examinations

1. Candidates electing to qualify for the Degree under Option III must write a comprehensive examination. The comprehensive examination shall examine the candidate's ability to integrate and apply material from all course work completed during study for the Degree. The candidate 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 Director of the School.

3. A candidate may not write the examination before completing the course work for the Degree.

Note: Every candidate in graduate studies shall comply with the General Regulations, the Degree Regulations and any additional requirements of the Department.

19.6 Courses

6000 Quantitative Methods in Physical Education
6001 Qualitative Research Methods in Physical Education
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 for Persons with Physical and Intellectual Disabilities
6125 Evaluation and Testing in Physical Education
6130 Computer Applications in Physical Education
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
6510-6513 Graduate Seminar Series (non-credit)
6610-15 Individual Reading and Research in Special Areas

20 Regulations Governing the Degree of Master of Public Health

Professor and Dean
J. Rourke

Professor and Associate Dean
P. Moody-Corbett

Professor and Assistant Dean
D. McKay

The degree of Master of Public Health (M.P.H.) is offered by the Faculty of Medicine, currently with a specialization of Population and Public Health, delivering 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 or 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 Recommended Course Sequence for Full-Time Students.
The General Regulations of the School of Graduate Studies and the Degree Regulations outlined below will apply.

20.1 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.

20.2 Program of Study
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: Public Health Leadership and Management (MED 6725), Epidemiology I (MED 6270), Policy and Decision Making (MED 6288), Communicable Disease Prevention and Control (MED 6724), Biostatistics I (MED 6200), Health Promotion (MED 6723), Environmental Health (MED 6722) and Disease and Injury Prevention (MED 6721).
   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 candidate.

   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).

   All course work must be completed prior to the initiation of either the Public Health Practicum or the Public Health Capstone Research Project.

   Table I - Master of Public Health Recommended Course Sequence for Full-Time Students

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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</table>
| Fall       | MED 6270 Epidemiology I  
MED 6288 Policy and Decision Making  
MED 6700 Public Health Seminar Series I  
MED 6724 Communicable Disease Prevention and Control  
MED 6725 Public Health Leadership and Management  
MED Elective Course |
| Winter     | MED 6200 Biostatistics I  
MED 6701 Public Health Seminar Series II  
MED 6721 Disease and Injury Prevention  
MED 6722 Environmental Health  
MED 6723 Health Promotion  
MED Elective Course |
| Spring     | MED 6710 Public Health Practicum, or  
MED 6711 Public Health Capstone Project |

20.3 Courses
A selection of the following graduate courses shall be offered to meet the requirements of candidates, 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)  
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
21 Regulations Governing the Degree of Master of Science

Professor and Dean
M. Abrahams

Professor and Associate Dean (Graduate and Research)
M. Courage

The degree of Master of Science (M.Sc.) is offered at present in Aquaculture, Biochemistry, Biology, Chemistry, Cognitive and Behavioural Ecology, Computational Science, Computational Science (Co-operative), Computer Science, Earth Sciences (Geology), Earth Sciences (Geophysics), Environmental Science, Experimental Psychology, Food Science, Geography, Instrumental Analysis, Marine Biology, Mathematics, Physical Oceanography, Physics, Statistics. Interdisciplinary studies are encouraged; applicants should consult the academic unit concerned.

21.1 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.

21.2 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 candidate 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 candidate 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 candidate 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.

21.3 Evaluation

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree, a candidate 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 candidate, the instructors in graduate courses, and the thesis or report Supervisor, that a candidate’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 candidate be required to withdraw from the program.

21.4 Thesis

See General Regulation Theses and Reports

Note: Every candidate in graduate studies shall comply with the General Regulations, the Degree Regulations and any additional requirements of the appropriate academic unit.

21.5 Aquaculture

Administrative Committee
Mr. C. Couturier, Fisheries and Marine Institute - Chair
Dr. K. Gamperl, Ocean Sciences Centre
Dr. L. Halliday, Fisheries and Marine Institute
Dr. C. Parrish, Ocean Sciences Centre
Dr. F. Shahidi, Department of Biochemistry

The program of study leading to the Master of Science in Aquaculture is designed to instruct students in research using scientific principles derived from a wide range of disciplines including Biology, Biochemistry and Food Science. Research problems may involve
field and laboratory studies on various marine and freshwater flora and fauna. The Aquaculture group consists of faculty members from the Fisheries and Marine Institute of Memorial University of Newfoundland, the Ocean Sciences Centre (OSC), and the Departments of Biology and Biochemistry of Memorial University of Newfoundland.

The Aquaculture Administrative Committee is responsible for the program. This Committee is composed of five appointed members, two from the OSC, two from the Fisheries and Marine Institute of Memorial University of Newfoundland, and one member from an appropriate academic unit at Memorial University of Newfoundland. In addition, the Heads of the Departments of Biochemistry and Biology, the Director of the OSC 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 is appointed by the Dean of Graduate Studies on the recommendation of the appropriate Heads and Directors. 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.

21.5.1 Qualifications for Admission
To be considered for admission to the Master of Science in 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 Diploma in Aquaculture offered by the Fisheries and Marine Institute of Memorial University of Newfoundland, with academic standing deemed appropriate by the Committee.

21.5.2 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 candidates will be required to take 6 credit hours in graduate courses which will normally be Aquaculture 6000 - Shellfish Culture and Enhancement, and Aquaculture 6100 - Finfish Aquaculture.
3. Candidates who do not hold the Diploma in Aquaculture will be required to complete successfully a selection of its component courses.
4. Further courses may be required depending on the background of the individual student.
5. Once in the program, M.Sc. students must achieve a minimum grade of 65% in all required courses.
6. 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.
7. The student will be required to comply with all other regulations governing the graduate Degree of Master of Science.

21.5.3 Courses
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)

Note: Consult the Program for a list of titles and information regarding availability.

21.6 Biochemistry
Professor and Head of the Department
M. Mulligan
1. The Degree of Master of Science is offered in Biochemistry or Food Science to full-time and part-time students.
2. The admission requirements for the graduate programs in Biochemistry and Food Science are as given under Regulations Governing Master of Science Degrees. Depending on the background and/or area of specialization, a candidate's program may include additional courses taken for credit in Biochemistry, Food Science or related subjects.
3. The program of a candidate 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.
4. It is the responsibility of the student to arrange regular meetings with his or her 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.
5. All graduate students are expected to attend and participate in the Departmental seminars. Any deficiencies noted during the seminar should be carefully considered by the student and the supervisory committee prior to submission of the thesis for final examination.

21.6.1 Courses
A series of advanced courses in the areas outlined below will be offered. Normally only one course will be offered per semester.
6200 Current Biochemical Research Topics I
6210 Current Biochemical Research Topics II
6400 Control of Intermediary Metabolism
6410 Molecular Endocrinology
6420 DNA: The Structure and Function of Genes (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6421 RNA: Structure, Function and Synthesis (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6422 Regulation of Protein Synthesis (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6430 Bioenergetics
School of Graduate Studies 2010-2011

6440 Membranes
6450 Proteins
6500 Enzymology
6520 Nutritional Biochemistry
6530 Food Biochemistry
6590 Molecular Biology I (cross-listed as Biology 6590 and Medicine 6590) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6591 Molecular Biology II (cross-listed as Biology 6591 and Medicine 6591) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6592 Bacterial Genetics (cross-listed as Biology 6592) Prerequisite: Biology 4241 or Biochemistry 4100 (or equivalent)
6593 Selected Readings in Molecular Biology (cross-listed as Biology 6593) Prerequisites or Co-requisites: Biology 6590, 6591/Medicine 6590, 6591 (or equivalent)
6600 Metabolic Toxicology
6610 Comparative Biochemistry
6620 Biochemical Adaptation
6630 Marine Biochemistry
6640 Biochemistry of Cancer
6650 Science and Technology of Seafoods
6660 Industrial Microbiology
6670 Biological Waste Treatment
6680 Processing and Quality of Foods

21.7 Biology

Associate Professor and Head of the Department
P. Marino

The Degree of Master of Science is offered in Biology and Marine 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. See appropriate sections of this Calendar.

21.7.1 Biology

1. The program of a candidate 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 candidate'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 candidate 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 candidate 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 candidate 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 candidate 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 candidate 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 candidates, 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.

21.7.2 Marine Biology

1. A program of study leading to a Degree of Master of Science with a specialization in Marine Biology is governed by the above regulations.

2. Students will be required to take Biology 7000 (Graduate Core Seminar) and an additional 12 credit hours. These 12 credit hours must include Biological Oceanography 7531, and at least two of 6710, 7535, 7540, 7541, 7551, 7560, and 7561. The remaining credit hours may be selected from any other Biology graduate courses or relevant graduate courses in other Departments.

21.7.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

6000 Research Topics in Microbiology
6100 Modern Problems in Botany
6110 Advanced Phycology
6120 Mycology
6350 Behavioural Ontogeny (Cross-listed as Psychology 6350)
6351 Behavioural Ecology and Sociobiology (Cross-listed as Psychology 6351)
6355 Field Course in Animal Behaviour (Cross-listed as Psychology 6355)
6400 Parasitic Protozoology
6410 Helmintology
6420 Parasitic Arthropods
6590 Molecular Biology I (Cross-listed as Biochemistry 6590 and Medicine 6590) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6591 Molecular Biology II (Cross-listed as Biochemistry 6591 and Medicine 6591) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6592 Bacterial Genetics (Cross-listed as Biochemistry 6592) Prerequisite: Biology 4241 or Biochemistry 4100 (or equivalent)
6593 Selected Readings in Molecular Biology (Cross-listed as Biochemistry 6593) Prerequisites or Co-requisites: Biology 6590, 6591/Biochemistry 6590, 6591 (or equivalent)
6700 Biology of the Molluscs
6710 Marine Benthic Biology
6900 Entomology
6910 Applied Entomology
7000 Graduate Core Seminar
7101 Topics in Marine Biology
7110 Cellular Physiology and Cytology
7140 Physiology of Parasitism
7201 Topics in Cellular and Molecular Biology and Physiology
7210 Arctic and Subarctic Biology
7220 Quantitative Methods in Biology
7250 Topics in Wildlife Biology
7270 Ecology of Newfoundland
7300 Ornithology
7301 Topics in Ecology and Conservation Biology
7520 Advances in Fish Biology
7530 The Molecular Basis of Development
7531 Biological Oceanography
7535 Research Methods in Marine Science
7540 Plankton Dynamics
7541 Physiological Ecology of Phytoplankton
7550 Fishery Biology
7551 Fisheries Resource Management
7560 Physiology of Marine Invertebrates
7561 Physiology of Marine Vertebrates
7570 Marine Benthic Biology
7600 Effect of Organic and Inorganic Pollutants on Biological Systems
7910 Community and Ecosystem Ecology
7920-7960 Special Topics in Biology

21.8.1 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
1. Program of Study
   a. The Department of Chemistry in collaboration with other faculty in Science offers a course-based program in instrumental analysis leading to the Degree of Master of Science. The program is available on a full-time or part-time basis and will normally require four semesters of study. The program is designed for students who wish to pursue career opportunities in all areas of applied science which require in-depth knowledge and laboratory expertise in analytical instrumentation.
   b. The program will be administered by a Program Committee consisting of the Deputy Head (Graduate Studies) who will be chair, the Program Co-ordinator (Chemistry) and a third faculty member from another science Department. The Program Committee will be responsible for overseeing that a level of standards be maintained.
   c. The Program Co-ordinator will be responsible for coordinating the course offerings and for soliciting student projects for the program to be approved by the Program Committee.

2. Qualifications For Admission
   Admission is limited and competitive. To be considered for admission, applicants shall normally hold a Bachelor's Degree in Science (with at least a minor in Chemistry, and having completed Chemistry 4100 or equivalent) with at least a second class standing from an institution recognized by the Senate. The Program Committee will make recommendations on admission to the Dean of Graduate Studies.

3. Program Requirements
   a. All programs must be approved by the Program Committee and by the Dean of Graduate Studies. All General Regulations of the School of Graduate Studies shall apply to this Degree.
   b. The program requires the completion of the 24 credit hours representing the eight required program courses, one project seminar, and a project report. Normally, completion of the program will require four semesters of study.
   c. A project seminar will be given to the Department of Chemistry at the end of the student's program.
   d. Students will be required to complete a research project, the scope of which will normally require no more than two semesters of full-time effort. The Project Report shall be evaluated according to the procedures outlined in Theses and Reports.

4. Required Courses
   6004 Project Seminar
   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 Medicine 6070)
   6160 Laboratory Projects in Sampling, Electroanalysis and Trace Analysis
   6161 Laboratory Projects in Analytical Separations and Spectroscopic Techniques

21.9 Cognitive and Behavioural Ecology

Administrative Committee
Dr. A. Storey, Department of Psychology - Chair
Dr. R. Anderson, Department of Psychology
Dr. T. Chapman, Department of Biology
21.9.1 Master of Science

1. Students normally take four courses (12 credit hours) in the first year. Students will be required to take Quantitative Methods in Biology (BIOL 7220) or Advanced Statistics in Psychology (6000) unless they have already passed an equivalent graduate or Honours course. Behavioural Ecology and Sociobiology (CABE 6351), Field and Lab Methods in Animal Behaviour and Behavioural Ecology (CABE 7000) and one elective, 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.

21.10.1 Professor and Program Chair
M. Plumer

21.10.2 Participating Departments and Organizations

This interdisciplinary program offers the Master of Science Degree in both Computational Science and Computational Science (Cooperative). The departments of 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 courses.

21.10.3 Admission Criteria and Procedures

1. The criteria for acceptance of an applicant are: his or her anticipated successful and timely completion of the program, and the willingness of a participating faculty member to supervise the applicant.

2. The assessment of an applicant's likelihood of success will be carried out in a variety of ways. Students will normally hold a B.Sc. (Honours) Degree, or equivalent, with a strong computational orientation. A general B.Sc. Degree, complemented by relevant experience, may also be acceptable. At the time of application, the student will be invited to demonstrate his or her background in the field. For example, the successful completion of a suitable B.Sc. which included a number of computer science courses or an undergraduate B.Sc. thesis which involved scientific computing would generally be acceptable, as would work experience which involved computing in a scientific environment.
3. Admission decisions will be made by the School of Graduate Studies on the recommendation of the Chair of the Administrative Committee.

21.10.4 Program of Study
1. The Computational Science Program is designed to train students in the state-of-the-art numerical methods, high performance computer architectures, use of software development tools for parallel and vector computers, use of graphics and multimedia tools and application of these techniques to at least one scientific or engineering discipline.
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.
3. The work for the thesis or project will be carried out under the guidance of a supervisory committee appointed by the Dean of the School of Graduate Studies on the recommendation of the Administrative Committee. Before submission of the thesis or project report to the School of Graduate Studies for examination, each student must present a seminar suitable for an interdisciplinary audience.
4. All student programs will contain a core of 9 credit hours in prescribed graduate courses. Additional courses, in an area of scientific specialization must also be completed. The course requirements for each student will be approved by the Administrative Committee on the recommendation of the student's supervisory committee, and will reflect the interdisciplinary nature of the program.
   a. The three core courses are: Computational Science 6910, Matrix Computations and Applications; Computational Science 6930, Numerical Linear Algebra for High-Performance Computers; Mathematics 6210, Numerical Solution of Differential Equations. The other courses will normally be taken from the list of approved courses.
   b. The thesis version requires the completion of 15 credit hours in graduate courses numbered 6000 or higher including 9 credit hours in prescribed core courses, and the submission of an acceptable thesis to the School of Graduate Studies for final examination. The thesis is to contain an original scholarly contribution. The two additional courses will normally be chosen from the list of approved courses and be in the same field as the thesis work.
   c. The project version requires the completion of 24 credit hours in graduate courses, including 9 credit hours in prescribed core courses, plus a project and an acceptable project report which must be submitted to the School of Graduate Studies for final examination. At least 9 credit hours of the additional 15 credit hours will normally be chosen from the list of approved courses. Nine of the 15 additional credit hours will normally be in the same field as the project. The project, which will include an in-depth written report, shall require the equivalent of at least one and no more than two semesters of full time work.

21.10.5 Co-operative Education Option
1. A co-operative education option will be available. 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. Students will be asked to indicate if they wish to follow this option at the time of application.
2. Students who are accepted into the M.Sc. program may be provisionally accepted into the co-op option. During their first two semesters, such students will interview with the Co-operative Education Services Centre and with prospective work term employers. Satisfactory performance in this phase of the program will lead to confirmation of acceptance into the co-op option, and allow the student to spend two of the next three terms working in industrial or government settings. Upon completion of each work term, the student must submit an acceptable work report.
3. 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.
4. 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, he or she will still be eligible for graduation, but without the designation of a co-op degree.

21.10.6 Courses
The core courses are:
- Computational Science 6910 Matrix Computations and Applications
- Computational Science 6930 Numerical Linear Algebra for High-Performance Computers
- Mathematics 6210 Numerical Solution of Differential Equations

The following courses are identified as suitable for students in this program. Other courses may be permitted.

Department of Chemistry
- 6301 Quantum Chemistry II
- 6310 Electronic Structure Theory

Computational Science
- 601W Work Term 1
- 602W Work Term 2
- 6900-6999 Special Topics
- 6910 Matrix Computations and Applications
- 6920 Scientific Programming
- 6925 Tools of the Trade for Programming High Performance Computers
- 6930 Numerical Linear Algebra for High-Performance Computers
- 6940 Computer Based Research Tools and Applications

Department of Computer Science
- 6713 Software Engineering
- 6722 Advanced Computer Architectures
- 6728-6729 Special Topics in Computer Systems - Computer Networks
- 6731 Topics in Numerical Methods
- 6738-39 Special Topics in Numerical Methods
- 6752 Applications of Computer Graphics
- 6756 Digital Image Processing
21.11 Computer Science

Associate Professor and Head of the Department
E. Brown

The degrees of Master of Science and Doctor of Philosophy are offered in Computer Science.

21.11.1 Master of Science

1. Admission into a Master’s program in Computer Science is restricted to candidates holding at least a Bachelor of Arts or Bachelor of Science degree (major in Computer Science or closely related discipline) 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.

2. Candidates are required to complete a minimum of 15 credit hours in graduate program courses, 9 of which must be in computer science.

3. Each candidate 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 candidate is required to present a tentative outline of his/her proposed research to the Supervisor, with a copy to the Department Committee on Graduate Studies, by the end of his/her 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.

4. Prior to submission of a thesis, normally in the last semester of the program, candidates are required to present a seminar on the thesis topic, methods employed and research results.

5. All candidates are expected to take an active part in seminars and other aspects of the academic life of the Department of Computer Science.

21.11.1.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

Programming Languages
6711 Syntax and Semantics of Programming Languages
6712 Compiling Techniques
6713 Software Engineering
6714 Functional Programming
6715 Logic Programming
6716 Concurrent Programming
6718-6719 Special Topics in Programming Languages

Computer Systems
6720 Distributed and Parallel Computing
6721 Operating Systems Design
6722 Advanced Computer Architectures
6723 Microprocessor Systems
6724 VLSI Design (same as Engineering 9863)
6725 Computational Aspects of VLSI (same as Engineering 9864)
6726 Modelling and Analysis of Computing Systems
6727 Introduction to High Performance Computer Systems
6728-6729 Special Topics in Computer Systems - Computer Networks

Numerical Computations
6731 Topics in Numerical Methods
6732 Matrix Computations
6738-6739 Special Topics in Numerical Methods

Theoretical Aspects
6741 Advanced Automata Theory
6742 Theory of Databases
6743 Complexity of Computational Problems
6745 Special Topics - Advanced Computational Geometry
6748-6749 Special Topics in Theoretical Computer Science

Applications
6751 Database Technology and Information Retrieval
6752 Applications of Computer Graphics
6753 Artificial Intelligence
6754 Post-Genomic Computational Biology
6755 Knowledge-Based Systems
6756 Digital Image Processing
6758-6759 Special Topics in Computer Applications
6770-6790 Special Topics in Computer Science

21.12 Earth Sciences
Professor and Head of the Department
J.M. Hanchar

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.

21.12.1 Master of Science
1. Admission into a Master's Degree program in Earth Sciences (Geology) and Earth Sciences (Geophysics) is restricted to candidates 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 candidate 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 candidate will meet with his/her 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 candidate 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 candidate 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 candidate is required to give an oral presentation to the Department on the results of his/her research. This presentation must be given during the second year of the program.
6. The M.Sc. Degree program will conclude with a thesis examination as prescribed in the Regulations Governing the Degree of Master of Science.
7. The Supervisor and the Head of the Department may recommend to the Dean of Graduate Studies that a candidate who is not making satisfactory progress be required to withdraw from the program.

21.12.2 Courses
A selection of courses will be offered to meet the requirements of candidates as far as the resources of the Department will allow.

Overview Courses
7110 Physics of the Solid Earth
7120 Crustal Geophysics
7300 Changes in Global Paleoenvironment
7400 Tectonic Regimes
7410 Advanced Exploration Seismology
7412 Borehole Seismic
7500 Chemical Fluxes in the Earth
7500 Chemical Fluxes in the Earth
7810 Paleoecology (same as the former 6810. Credit may be obtained for only one of 7810 or 6810)

General Courses
6070 Quantitative Techniques in Mineralogy and Metamorphic Petrology
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
21.13 Environmental Science

Board of Studies
Dr. J. Wroblewski, Ocean Sciences Centre - Chair
Dr. C. Campbell, Sir Wilfred Grenfell College
Dr. B. Chen, Faculty of Engineering and Applied Science
Dr. R. Chuenpagdee, Department of Geography
Dr. P. Marino, Head, Department of Biology
Dr. W. Montevecchi, Department of Psychology
Dr. L. Tarasov, Department of Physics and Physical Oceanography
Dr. S. Ziegler, Department of Earth Sciences

21.13.1 Program of Study

1. The Environmental Science Program is an interdisciplinary graduate program involving the departments of the Faculty of Science, the Department of Geography, and the Faculty of Engineering and Applied Science of Memorial University of Newfoundland. 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. Admission is open to students with appropriate Science, Geography or Engineering backgrounds.

2. The program is administered by a Board of Studies appointed by the Dean of Science.

21.13.2 Qualifications for Admission

Admission is limited and competitive. To be considered for admission applicants shall normally hold an Honours degree in Science or Geography 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.

21.13.3 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. Master of Environmental Science
   a. The Master of Environmental Science is a multidisciplinary course-based Degree, focused on environmental issues. The Degree program provides for both multidisciplinary courses and for courses focused on the student’s specific area of interest.
   b. The Degree program requires the completion of 27 credit hours.
      i. Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be ENVE/ENVS 6000, ENVS 6009 and ENVS 6010 and 6 credit hours from ENVE/ENVS 6001, 6002 and 6003.
      ii. Students will be required to take a minimum of 12 credit hours in elective courses approved by the Board of Studies, 9 credit hours of which will normally be selected from graduate courses offered by the Faculties of Science, and Engineering and Applied Science. Students are advised to consult with instructors and Faculties regarding necessary prerequisites and availability.

3. Master of Science (Environmental Science)
   a. 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, and will be supervised by appropriate faculty, normally in the Faculties of Science and/or Engineering and Applied Science. The course component has two aims: to broaden the students’ understanding of environmental issues; and to provide further training in areas of research specialization for the thesis.
   b. 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.
   c. The program of each student will consist of a minimum of 15 credit hours in program courses which will include ENVE/ENVS 6000 and ENVS 6010. Of the 9 credit hours remaining in program courses, 3 credit hours will be from ENVE/ENVS 6001, 6002 and 6003 and the other credit hours will be related to the student’s specialty and will normally be chosen from graduate courses offered by the Faculties of Science, and Engineering and Applied Science.
   d. 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 Regulation Theses and Reports.

21.13.4 Courses

ENVE/ENVS 6000 Environmental Science and Technology
ENVE/ENVS 6001 Earth and Ocean Systems
21.14 Food Science
See Biochemistry.

21.15 Geography
Associate Professor and Head of the Department
C. Mather

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. Candidates 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. Candidates 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. Candidates 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 candidates who have not already completed equivalent courses at the Honours or post-graduate level.
9. Candidates 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 candidate will be required to present a seminar on their research to the Department.
11. Each candidate 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.

21.15.1 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates 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
6180 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

21.16 Geology
See Earth Sciences
21.17 Geophysics
See Earth Sciences

21.18 Instrumental Analysis
See Chemistry

21.19 Mathematics and Statistics
Professor and Head of the Department
C. Radford

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.

21.19.1 Specific Requirements for the M.Sc. in Mathematics

Every candidate for the M.Sc. in Mathematics is required to complete one of two options.

1. **Option 1:** At least 15 credit hours in graduate courses, at most 3 of which may be from seminar courses (excluding Math 696A/B) and at least 9 of which must be in courses selected from the list below with at least 3 credit hours in three of the indicated subject areas. Remaining course selections to satisfy the total credit hour requirement for this option may be chosen from the departmental course offerings, excluding Math 6299. A thesis is required as per General Regulations, Theses and Reports.

2. **Option 2:** At least 23 credit hours in graduate courses, including Math 696A/B, Math 6299 and at least 9 credit hours in courses selected from the list below with at least 3 credit hours in three of the indicated subject areas. Remaining course selections to satisfy the total credit hour requirement for this option may be chosen from the departmental course offerings, excluding seminar courses.

- Algebra: 6320, 6321
- Analysis: 6310, 6311, 6312
- Applied Mathematics: 6100, 6201 or 6212, 6120
- Combinatorics: 6340, 6341, 6342
- Topology: 6300 or 6301, 6332

21.19.2 Specific Requirements for the M.Sc. in Statistics

Every candidate for the M.Sc. in Statistics is required to take at least 18 credit hours in graduate courses, at most 3 credit hours of which may be from seminar courses. A thesis is required.

### Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses

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21.19.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

**Mathematics**

- 6100 Dynamical Systems
- 6101 Modern Perturbation Theory
- 6102-6119 Special Topics in Applied Mathematics
- 6104 Infinite Dimensional Dynamical Systems
- 6120 Theoretical Fluid Dynamics
- 6121 Functional Differential Equations
- 6130 Introduction to General Relativity
- 6160 Partial Differential Equations
- 6201 Numerical Methods for Partial Differential Equations
- 6202-6209 Special Topics in Numerical Analysis
- 6210 Numerical Solution of Differential Equations
- 6212 Numerical Methods for Initial Value Problems
- 6299 Master's Project
- 6300 Algebraic Topology I (Homology Theory)
- 6301 Algebraic Topology II (Homotopy Theory)
- 6302 Algebraic Topology III (Theory of Fibre Bundles)
- 6304-6309 Special Topics in Topology
- 6310 Functional Analysis
- 6311 Complex Analysis
- 6312 Measure Theory
- 6318-6319 Special Topics in Analysis
- 6320 Group Theory
21.20 Physics and Physical Oceanography
Professor and Head of the Department
B. de Young

Programs leading to the Degree of Master of Science in Physics and in Physical Oceanography are offered to both full and part-time students. Because Oceanography is multidisciplinary in nature, undergraduate students who plan to undertake Physical Oceanography studies are urged to consult the faculty member in charge of Physical Oceanography programs at their earliest opportunity, in order to ensure the appropriateness of their undergraduate course selections. The Degree of Doctor of Philosophy in Physics is offered through both full-time and part-time study in Atomic and Molecular Physics, Condensed Matter Physics, and Physical Oceanography. 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.

21.20.1 Master of Science
1. Admission to a M.Sc. program in the Department of Physics and Physical Oceanography is normally restricted to candidates holding an Honours B.Sc. Degree in Physics. However, depending on background and area of specialization and with particular reference to Physical Oceanography, other Baccalaureate degrees in science, applied science or mathematics, may be accepted.
2. A program of study for the M.Sc. Degree in Physics or Physical Oceanography shall normally include a minimum of 12 graduate credit hours. However, depending on the student's background and area of specialization, more or fewer graduate and/or undergraduate courses may be required.
3. Except with the special permission of the Department and the approval of the Dean of Graduate Studies, a candidate may not take any courses in addition to those approved for his/her M.Sc. program.
4. 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.

21.20.1.1 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, 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 Non-equilibrium Statistical Mechanics
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.)

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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

21.21 Psychology
Professor and Head of the Department
I. Neath

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 Social Psychology (Cooperative) and the Master of Science and Doctor of Philosophy in Cognitive and Behavioural Ecology programs.

Applications
All applicants are required to submit results from the General section of the Graduate Record Examinations.
At least one letter of reference should come from someone who is familiar with the applicant's research capability.

21.21.1 Master of Science
A candidate 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. Candidates shall normally complete 15 credit hours, including: Advanced Statistics in Psychology (6000), Research Design (6001), Core Graduate Seminar in Psychology (699A/B), and 6 credit hours related to their area of specialization. Candidates 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 candidate shall submit an original thesis based upon an approved experimental research topic.

21.21.1 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:
- 6000 Advanced Statistics in Psychology
- 6001 Research Design
- 6100 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 Advanced Methods in Applied Social Psychological Research
- 6404 Project in Applied Social Psychology (Note: This course is open only to students in the Master of Applied Social Psychology)
- 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
- 6810 Personality
- 699A/B Core Graduate Seminar in Psychology (3 credit hours).

22 Regulations Governing the Degree of Master of Science in Kinesiology

Associate Professor and Acting Director
A. Card

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.

22.1 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. 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 candidate to the program shall be made by the Dean of Graduate Studies.
2. Only in exceptional circumstances, and only on the recommendation of the Director of the School of Human Kinetics and Recreation, shall the Dean of Graduate Studies consider applicants who do not meet the requirements above.

22.2 Program and Degree Requirements
1. The Degree of Master of Science in Kinesiology is offered in the areas of Exercise and Work Physiology, Biomechanics/Ergonomics and Sport Psychology.
2. The program of a candidate 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 Director of the School, or delegate.
3. Candidates for the Master of Science in Kinesiology shall be required to complete a minimum of 15 credit hours plus a thesis. HKR 6000 is normally required for all candidates. In addition, all on-campus candidates shall be required to complete four semester-length seminar courses (HKR 6510-6513). Off-campus or part-time candidates 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 Director 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 candidate or his/her area of intended specialization, a candidate's program may be modified. Such modifications may include a reduction in course requirements where a student demonstrates that he or she 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 his or her proposed thesis normally by the end of the third semester of study. Candidates will be questioned on their proposal by a three-member panel appointed by the Director in consultation with the Supervisory Committee. Any deficiencies noted during the proposal should be carefully considered by the student and the Supervisory Committee prior to approval of the thesis topic.

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. Candidates may apply for transfer course credits. All course transfers require the approval of the Dean of Graduate Studies, on the recommendation of the Director 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.

22.3 Evaluation

1. In order to continue as a candidate for a Master of Science in Kinesiology Degree, a candidate 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 candidate's graduate program. Should a grade of lower than 'B' be obtained in the repeated course/replacement course, or any other program course, the candidate 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 candidate, the instructors of graduate courses and the program advisor or thesis Supervisor that the candidate's work has fallen below satisfactory level, it may request that the Director of the School of Human Kinetics and Recreation recommend to the Dean of Graduate Studies that the candidate's program be terminated.

22.4 Period of Study

The period of study for a graduate program shall not normally exceed seven years beyond first registration.

1. A candidate 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 candidate in part-time attendance may register for a maximum of 3 credit hours in any semester, including intersession or summer session.

22.5 Thesis

The School of Graduate Studies General Regulation describes the requirements in Theses and Reports.

22.6 Courses

6000 Quantitative Methods in Physical Education
6001 Qualitative Research Methods in Physical Education
6130 Computer Applications in Physical Education
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
6320 Exercise Physiology II
6330 The Application and Implementation of Kinesiology Technologies
6340 Occupational Biomechanics
6510-6513 Graduate Seminar Series (non-credit)
6610-15 Individual Reading and Research in Special Areas

23 Regulations Governing the Degree of Master of Science in Medicine

Professor and Dean
J. Rourke

Professor and Associate Dean
P. Moody-Corbett

Professor and Assistant Dean
D. McKay

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. Each program area has a Co-ordinator 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 Faculty of Medicine also offers the degree of Master of Public Health.

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 by part-time study only.

The following regulations will apply in conjunction with the General Regulations of the School of Graduate Studies.
23.1 Master of Science in Medicine

23.1.1 Qualification for Admission
The admission requirements for each of the M.Sc. Program areas in Medicine are described under Programs of Study.

23.1.2 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 candidate’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. In addition, all students will be required to complete GRAD 9991 (Graduate Research Integrity Program).
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.

23.1.3 Program Areas
23.1.3.1 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), Dalhousie University (Dal), 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 and Site Co-ordinators from UNB, Memorial University of Newfoundland, Dal 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 eight core courses, the Graduate Research Integrity Program, a four-month residency placement and a thesis. In addition, candidates must participate in five conference workshops each of one week duration.
   b. Prior to submission of the thesis to the School of Graduate Studies for examination (see General Regulation Thesis and Reports), candidates shall present an open seminar.
   c. Outline of program of study:
Term | Required Courses
---|---
**Fall - Semester 1** | Workshop 1  
  Theme: Orientation to first year  
  MED 6282  
  MED 6284  
  MED 6286  
  Workshop 2  
  Theme: Research Issues and Critical Appraisal

**Winter - Semester 2** | MED 6288  
  MED 6290  
  MED 6292  
  Workshop 3  
  Theme: Policy and Decision Making

**Spring - Semester 3** | Residency Placement: All candidates 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.  
  Workshop 4  
  Theme: Orientation to second year

**Fall - Semester 4** | MED 6293  
  MED 6294 or  
  MED 6295  
  Workshop 5  
  Theme: Communication and Dissemination

**Winter & Spring - Semester 5 & 6** | Thesis, including public presentation

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### 23.1.3.2 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 6400-6403). 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.

### 23.1.3.3 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. The faculty participating in the program consists of basic cardiovascular scientists and renal clinicians. Teaching within the program is integrated with the M.D. program.

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.

### 23.1.3.4 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 health care professionals interested in health care delivery 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: Biostatistics I (MED 6200), Basic Clinical Epidemiology (MED 6250), Clinical Research Design (MED 6255) and Applied Data Analysis for Clinical Epidemiology (MED 6260) plus one or more additional course(s) as recommended by the supervisory committee. In addition students are required to take the Seminar Series (MED 6400-6403).
   b. Students are expected to give an oral presentation of their thesis research.

### 23.1.3.5 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 for admission.
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: Introduction to Community Health (MED 6220), Epidemiology I (MED 6270) and Community Health Research Methods (MED 6280); 2 core stream courses: either the quantitative stream, consisting of Biostatistics I (MED 6200) and Epidemiology II (MED 6275) or the qualitative stream, consisting of Advanced Qualitative Methods (6294) and Critical Theory in Health and Society (MED 6102); and 1 elective; and to attend, for credit, and participate in four semester-length seminar courses (MED 6400-6403).

23.1.3.6 Human Genetics

The program in human genetics will enable students to pursue academic studies and research in a number of areas of genetics including cancer genetics, genetic epidemiology, gene mapping, medical genetics, birth defects and population genetics. Faculty members from all three divisions of the Faculty of Medicine (Basic Sciences, Community Health and Clinical Sciences) 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) 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 6580) and Molecular Biology II (MED 6581). 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 are expected to participate in the activities of the genetics group. These include the weekly Journal Club/Research Discussion Group and the Genetics Seminar Series (MED 6400-6403).

23.1.3.7 Immunology and Infectious Diseases

The Immunology and Infectious Diseases group has an interdisciplinary character and consists of faculty from biomedical science oncology research. 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 three core courses: Immunology I (MED 6127), Immunology II (MED 6128) and Advanced Immunological Methods (MED 6130). 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) for a minimum of three semesters.

23.1.3.8 Neurosciences

The Neuroscience Program offers graduate studies in an interdisciplinary setting including faculty from biomedical science within the Faculty of Medicine and Department of Psychology in the Faculty of Science. 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 and membrane physiology. The Neuroscience Program is a Chapter of the Society for Neurosciences.

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.

23.2 Graduate Diploma

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 Community Health and Humanities or Clinical Epidemiology.

23.2.1 Qualifications for Admission

To be admitted to the graduate diploma program a student must be eligible to register as a graduate student, as given under the General Regulations governing M.Sc. degrees. In special circumstances, and upon the recommendation of the Community Health and Humanities, or Clinical Epidemiology Co-ordinator, a suitable combination of training and professional experience relevant to the program may be acceptable for admission.

23.2.2 Program Requirements

A graduate diploma in Community Health and Humanities requires successful completion of Introduction to Community Health (MED 6220), Epidemiology I (MED 6270), 3 electives, and 2 semester-length seminar courses (MED 6400-6401).

A graduate diploma in Clinical Epidemiology requires successful completion of Medicine 6200, 6250 and 6255 and the completion of a minimum of two of the Clinical Epidemiology seminar courses: Medicine 6400-6403 Research Seminars for M.Sc. Students I-IV.
23.2.3 Graduate Courses

6070 Seminars in Physiological Instrumentation
6090-6101 Special Topics
6127 Immunology I
6128 Immunology II (Prerequisite Medicine 6127)
6130 Advanced Immunological Methods
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
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
6199 Health Sciences: Writing and Grantsmanship
6200 Biostatistics I
6201 Elementary Statistics (one-credit hour)
6202 Univariate Inference (Prerequisite: 6201) (one-credit hour)
6203 Multivariate Inference (Prerequisite: 6202) (one-credit hour)
6220 Introduction to Community Health
6221 Concepts of Public Health (one-credit hour)
6222 Health Protection and Disease Prevention (Prerequisite: 6221) (one-credit hour)
6223 Health Promotion (Prerequisite: 6222) (one-credit hour)
6250 Basic Clinical Epidemiology
6251 Introduction to Clinical Epidemiology (one-credit hour)
6252 Critical Appraisal (Prerequisite: 6251) (one-credit hour)
6253 Clinical Measurement (Prerequisite: 6252) (one-credit hour)
6255 Clinical Research Design
6260 Applied Data Analysis for Clinical Epidemiology
6270 Epidemiology I
6271 Principles of Epidemiology (one-credit hour)
6272 Observational Study Design (Prerequisite: 6271) (one-credit hour)
6273 Survey Methodology (Prerequisite: 6272) (one-credit hour)
6274 Chronic Disease Epidemiology
6275 Epidemiology II
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
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
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 Biochemistry 6590 (Prerequisites: Biology 4241, Biochemistry 4100 [or equivalent])
6591 Molecular Biology II - cross-listed as Biology 6591 and Biochemistry 6591 (Prerequisites: Biology 4241, Biochemistry 4100 [or equivalent])
School of Graduate Studies

24 Regulations Governing the Degree of Master of Science in Pharmacy

Associate Professor and Director
L.R. Hensman

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 candidate in graduate studies shall comply with the General Regulations, the Degree Regulations and all additional requirements of the School of Pharmacy.

24.1 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 candidate will be admitted to the program without a recommendation of acceptance by the Graduate Studies Committee. Admission of a candidate to the M.Sc. (Pharm.) program shall be made by the Dean of Graduate Studies.

24.2 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 his/her 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 his/her thesis research. Accordingly, they will meet with the student within two months of his/her 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.

24.3 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 his/her 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 candidates 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 his/her 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.

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
- 6100-6104 Special Topics in Pharmacy

M.Sc. (Pharm.) Thesis

Every candidate shall submit a thesis to the School of Graduate Studies. The thesis shall contain original research conducted by the candidate and approved by the supervisory committee.

In preparation for the thesis examination, the candidate 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 Director of the School of Pharmacy or the Chairman of the Graduate Studies Committee.
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 by distance format, and not in a regular classroom format. “Distance delivery” includes course delivery using any or all of web-based format, traditional correspondence (readings packages, mailed assignments), and/or teleconferencing, audio-conferencing, and/or videoconferencing.

For students admitted prior to Fall 2011, the focus of the M.S.W. program is advanced clinical practice. However, the School of Social Work has undertaken a major redesign of the M.S.W. program. As a result, for students admitted beginning Fall 2011, the focus of the new M.S.W. program will be 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 new regulations applicable to the revised program have been incorporated into the regulations below.

The program is designed to be accessible to students in remote and rural areas, and assumes that: (1) students will have a computer and Internet access; and (2) can travel to St. John’s for the institute portion of the three practice courses. Students studying outside St. John’s, Newfoundland and Labrador, will also be expected to incur charges for Internet services, teleconference 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 for the M.S.W. and/or other programs of the School to identified groups of out-of-province students where numbers warrant. These offerings will be self supporting, and therefore subject to an additional one-time non-refundable 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 Graduate Studies 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 Graduate Studies 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 one-time fee upon formal transfer to the special offering.

### 25.1 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 Graduate Studies Committee of the School of Social Work for recommendation to the Dean) 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 First Nations/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 who are members of other equity groups (e.g., members of sexual minority groups; members of racial/ethnic minority groups; persons with disabilities; and persons disadvantaged by their economic position/background) 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 Graduate Studies Committee of the School of Social Work, at its discretion, may give preference to additional applicants of First Nations/Aboriginal ancestry and/or members of other equity 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.

### 25.2 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 Graduate Studies 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 criminal record check; 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.

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. Under special circumstances, late applications and admissions in other semesters may be considered.

3. The Graduate Studies Committee of the School of Social Work may require the applicant to appear for a personal interview with one or more faculty members.

4. A person who meets the basic admission requirements under Qualifications for Admission, may, space permitting, take SCWK 6011 without applying for and being admitted to the M.S.W. program. Beginning Fall 2011, a person who meets the basic admission requirements under Qualifications for Admission, may, space permitting, take SCWK 6012 without applying for and being admitted to the M.S.W. program. Persons wishing to take courses under this provision must contact the M.S.W. Student Services Coordinator at least two months prior to the semester in which the course is scheduled. 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 with evidence of B.S.W. graduation, academic transcripts, and a brief professional resume, 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.

25.3 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 Director of the School in consultation with the student. It is recommended that a thesis Supervisor be assigned as early in the program as possible. For students admitted prior to Fall 2011, the thesis Supervisor, when assigned, shall normally assume the duties of faculty advisor. For students admitted beginning Fall 2011, the thesis supervisor, when assigned, shall normally assume the duties of faculty advisor and Pathway mentor.

4. Students admitted prior to 2011 who choose the thesis route, must complete a thesis and a minimum of 21 credit hours consisting of SCWK 6011, 6312 (or 6313), 6322 (or 6314), 6332 (or 6315), 6412 (or 6413), 6422 (or 6013) and 6912 (or 6917). In addition to these courses, course route students also must complete 6432 (Research Internship), 6442 (Colloquium) and a 3 credit hour graduate elective in social work (or one of 6013 or 6014). Students in either route may be required to take additional courses.

5. a. Students admitted as of 2011, who choose the thesis route, must complete a thesis, and a minimum of 21 credit hours consisting of SCWK 6012 (or the former 6011), 6013, 6014, 6413, 6917, and at least two of SCWK 6313, 6314, and 6315. Course route students must complete a minimum of 27 credit hours consisting of SCWK 6012 (or the former 6011), 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 revised 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.

i. Full-time 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 students 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.

iii. By the end of the sixth week of the first semester in which students are registered in SCWK 6000, they are required to submit a paper to their mentor, which, once agreed upon, will serve as an individual learning contract. The paper will outline: particular areas of interest, research, or study concentration; proposed goals, objectives, outcomes, and time frame; proposed list of readings; plan of study demonstrating how work in the various courses might be integrated or connected to their area of interest; and expectations of the mentor.

Students are also required to submit a written progress report due the last day of classes of each semester, beginning with the first semester in which they are registered in SCWK 6000. Students are also required to submit a written final report summarizing their experiences and accomplishments as per the initial learning contact. This report is due the last day of classes of the final semester in which students are registered in 6000.

iv. A grade of NC (No Grade Expected) will be awarded in all semesters of the course prior to the final Semester. The final grade in this non-credit course will be either Pas or Fal.

25.4 Field Internship SCWK 6912 (SCWK 6917 Beginning Fall 2011)

Each M.S.W. student is required to complete a 500 hour field internship that is to be conducted in a setting and supervised by a field instructor approved by the School of Social Work. The M.S.W. Field Coordinator is responsible for facilitating appropriate matches between the student, field instructor, and field internship setting. Field instructors must have as a minimum qualification an M.S.W. Degree and a minimum of two years post-M.S.W. social work employment. Although consideration will be given to all factors affecting the location and type of social work field internships, final approval of a field internship 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 internship. Part-time field internships of two semesters will require approval from the proposed agency, field instructor, and the M.S.W. Field Coordinator.

At least four months prior to the commencement of the semester in which they intend to begin SCWK 6912 (6917 beginning Fall 2011), all students shall submit a completed Intent to Register in M.S.W. Field Internship form. At least six weeks before the internship commences, students shall submit an M.S.W. Field Internship Proposal. Evaluation of the field internship will be on a PAS/FAL basis.

Students who voluntarily withdraw from the field internship without prior approval of the M.S.W. Field Coordinator and the Graduate Officer, or who conduct themselves in such a manner as to cause the agency and the M.S.W. Field Coordinator to terminate the placement, will normally be awarded a grade of FAL in the field internship.

Students who voluntarily withdraw from the field internship with the prior approval of the M.S.W. Field Coordinator and the Graduate Officer cannot be guaranteed a second internship during that semester. In this case, the student will be awarded a grade of INC for the field internship. The student shall normally complete a field internship the following semester.

25.5 Course Format

To increase accessibility for students in remote and rural areas, we offer courses in the following formats:

1. SCWK 6011, 6412, 6422, and social work electives (and beginning Fall 2011: SCWK 6012, 6013, 6014, and 6413) will be offered by distance delivery; that is, not in a regular classroom format.

2. SCWK 6312, 6322 and 6332 (and beginning Fall 2011: 6313, 6314, and 6315) will be offered by residential institute consisting of 36
hours of classroom instruction. These courses also include home-study and teleconference and/or Internet components scheduled prior to and/or following the institute. Students must be available on a full-time basis to attend classes and complete assignments and group projects during the institute portion of these courses. It is recommended that students take leave from their employment for the duration of a residential 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 residential institute schedule rests with the School of Social Work.

3. SCWK 6912, 6432, and 6917 (beginning Fall 2011) can be completed in St. John's, or in a student's home community, where appropriate supervision is available.

4. SCWK 6442, Colloquium, may be conducted in St. John's or in a student's home community, provided suitable audio-visual recording facilities are available.

5. SCWK 6000 and 6417 (both beginning Fall 2011) can be completed in St. John’s or in a student’s home community.

6. In exceptional circumstances, and contingent upon student numbers and school resources, additional course sections may be offered in a regular classroom format.

25.6 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).

2. For full-time students, course route, admitted prior to Fall 2011, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:
   Fall semester: SCWK 6011, 6312 (institute), 6412
   Winter semester: 6322 (institute), 6422, Elective
   Spring semester: 6332 (institute), 6912 (field internship), 6432 (research internship), 6442 (colloquium)

3. For full-time students, course route, admitted beginning Fall 2011, 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), 6413
   Winter semester: 6000, 6013, 6014, 6314 (institute)
   Spring semester: 6000, 6315 (institute), 6917 (field internship), 6417 (Pathway Scholarship)

4. For full-time students, thesis route, admitted prior to Fall 2011, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:
   Fall semester: SCWK 6011, 6312 (institute), 6412
   Winter semester: 6322 (institute), 6422
   Spring semester: 6332 (institute), 6912, (field internship), Thesis

5. For full-time students, thesis route, admitted beginning Fall 2011, 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), 6413
   Winter semester: 6000, 6013, 6014, 6314* (institute)
   Spring semester: 6000, 6315* (institute), 6917 (field internship), Thesis

   * Thesis students are required to complete only two of the three institute courses.

25.7 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/practice/code3_e.html). Students who are registered in their home province are required to comply with the current Code of Ethics of their provincial association of social workers. 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/practice/code3_e.html). Students who fail to meet this requirement will be required to withdraw from the School upon the recommendation of the Graduate Studies Committee.

25.8 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the School will allow.

Program Core Courses Prior to Fall 2011
6011 Critical Thinking and Ethical Evaluation for Assessment and Intervention
6312 Crisis Intervention, Brief and Integrated Therapies for Diverse Individuals (Prerequisite/Co-requisite 6011)
6322 Family Therapy: Promotion of Strengths and Prevention of Violence in Diverse Families (Prerequisite 6011)
6332 Social Work Perspectives in Interdisciplinary Team Development and Group Therapy (Prerequisite 6011)
6412 Research Design for Social Work Assessment and Evaluation (Prerequisite/Co-requisite 6011)
6422 Data Analysis for Social Work Assessment and Evaluation (Prerequisite 6011 and 6412)
6432 Research Internship (2 credit hours) (Prerequisite 6011, 6412 and 6422)
6442 Colloquium Presentation Integrating Theory and Research in Advanced Clinical Practice (1 credit hour) (following completion of all other program components)
6912 Advanced Clinical Practice Internship (Prerequisites 6011, 6312, 6322 and Prerequisite/Co-requisite 6332)
Graduate Research Integrity Program (refer to Graduate Research Integrity Requirement)

Program Elective Courses Prior to Fall 2011
6230 Seminar in Community Development
6550 Seminar in Social Administration: Evaluation of Policies and Programs
6540 Supervision in Professional and Clinical Practice
6550 Feminist Therapy in Social Work Practice

Program Courses beginning Fall 2011
6000 Pathway (mandatory repeatable non-credit course)
6012 Critical Thinking and Reflection (credit may not be obtained for both 6012 and the former 6011)
6013 Leadership for Social Justice (Prerequisite 6012)
6014 Leadership in Social Policy and Programs (Prerequisite 6012, 6013) (credit may not be obtained for both 6014 and the former 6530)
6313 Perspectives with Individuals and Families (Prerequisite/Co-requisite 6012) (credit may not be obtained for both 6313 and the former 6312 or 6322)
6314 Perspectives with Diverse Communities (Prerequisite 6012) (credit may not be obtained for both 6314 and the former 6230)
6315 Perspectives with Groups (Prerequisite 6012) (credit may not be obtained for both 6315 and the former 6332)
6413 Research Theory, Design, and Analysis (Prerequisite/Co-requisite 6012) (credit may not be obtained for both 6413 and the former 6412 or 6422)
6417 Pathway Scholarship (following completion of all other program components) (credit may not be obtained for both 6417 and the former 6432 or 6442)
6917 Field Internship (Prerequisites 6012; 6313; 6314; and Prerequisite/Co-requisite 6315) (credit may not be obtained for both 6917 and the former 6912)

Graduate Research Integrity Program (refer to Graduate Research Integrity Requirement)

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
6510 Seminar in Social Administration: Social Policy Analysis, Development and Administration
6520 Seminar in Social Administration: Program Design and Development
6820-29 Individual Reading and Research in Special Areas

Thesis
See General Regulations, Theses and Reports.

Note: Every candidate shall comply with the General Regulations governing the School of Graduate Studies and the M.S.W. Degree Regulations.

26 Regulations Governing the Degree of Master of Technology Management

Executive Director
G. Blackwood

Academic Director
C. Coronado

26.1 Administration
The Program will be administered by an Academic Director appointed by the Executive Director of the Fisheries and 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 Executive Director of the Fisheries and 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 Executive Director of the Fisheries and 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.

26.2 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 is offered online and requires successful completion of either (i) 24 credit hours of course work, including specialized technology-management courses, courses from the Faculty of Business Administration M.B.A. program, and a comprehensive project and report (6 credit hours), or (ii) 30 credit hours of comprehensive course work. Candidates will typically register on a part-time basis, but any who register for full-time study will normally complete the program in one academic year.

26.2.1 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 Bachelor of Technology, Bachelor of Maritime Studies, or other undergraduate degree with appropriate technology sector and business management course work; and
   - a minimum of two (2) years relevant employment experience.
2. The deadlines for submission of applications for candidates wishing to enter studies are as follows:
   - Fall (September) semester: April 15
   - Winter (January) semester: August 15
   - Spring (May) semester: December 15
Applications received after listed deadlines will be considered as time and resources permit.

26.2.2 Program of Study
1. Candidates for the Master of Technology Management 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 four compulsory core courses (12 credit hours); and four elective courses (12 credit hours). Students on the project route will complete MSTM 6100: Project in Technology Management (6 credit hours).

i. **Core Courses (Four to be completed):**
   - BUSI 8104 Organizations: Behaviour and Structure
   - BUSI 8209 Leadership and Interpersonal Skills for Managers (Prerequisite: BUSI 8104)
   - MSTM 6031 Managing Technical Operations
   - MSTM 6032 Managing Technological Innovation

ii. **Elective Courses (Four to be completed: minimum of one course from Category A and two from Category B):**
    **Category A**
    - BUSI 8106 Marketing
    - BUSI 8107 Managing Ethics and Responsibility
    - BUSI 8109 Accounting for Management
    - BUSI 8204 Human Resource Management (PR: BUSI 8104)
    **Category B**
    - MSTM 6022 Communication and Conflict Management
    - MSTM 6023 Strategic Planning, Policy, Participation and Management
    - MSTM 6033 Quality Systems and Management
    - MSTM 6034 Project Management
    - MSTM 6035 Information Technology Applications
    - MSTM 6036 Supply Chain Management and Advanced Technical Operations
    - MSTM 6037 Risk Analysis and Management
    - MSTM 6038 Manufacturing and Technology Management
    - MSTM 6039 Sustainability and Environmental Responsibility

b. 30 credit hours on a comprehensive-course route. Course work includes four compulsory core courses (12 credit hours); and six elective courses (18 credit hours).

i. **Core Courses (Four to be completed):**
   - BUSI 8104 Organizations: Behaviour and Structure
   - BUSI 8209 Leadership and Interpersonal Skills for Managers (Prerequisite: BUSI 8104)
   - MSTM 6031 Managing Technical Operations
   - MSTM 6032 Managing Technological Innovation

ii. **Elective Courses (Six to be completed: minimum of one course from Category A and four from Category B):**
    **Category A**
    - BUSI 8106 Marketing
    - BUSI 8107 Managing Ethics and Responsibility
    - BUSI 8109 Accounting for Management
    - BUSI 8204 Human Resource Management (PR: BUSI 8104)
    **Category B**
    - MSTM 6022 Communication and Conflict Management
    - MSTM 6023 Strategic Planning, Policy, Participation and Management
    - MSTM 6033 Quality Systems and Management
    - MSTM 6034 Project Management
    - MSTM 6035 Information Technology Applications
    - MSTM 6036 Supply Chain Management and Advanced Technical Operations
    - MSTM 6037 Risk Analysis and Management
    - MSTM 6038 Manufacturing and Technology Management
    - MSTM 6039 Sustainability and Environmental Responsibility

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. Those having already completed an M.B.A. degree at this University, or a degree recognized as equivalent by the Dean of Graduate Studies, may be granted advanced standing and fulfill the requirements for this degree by completing either (i) the two required MSTM courses, three electives chosen from Category B, and the Project in Technology Management (MSTM 6100) or (ii) the two required MSTM courses and five electives from Category B.

### 26.2.3 Evaluation

1. Candidates for the Master of Technology Management Degree must obtain a grade of B or better in all program courses.

2. Candidates 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 candidate 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 candidate's program after which the candidate shall be required to withdraw from the program.

### 27 Regulations Governing the Degree of Master of Women's Studies

**Associate Professor and Head of the Department**

K. Side

The Degree of Master of Women's Studies (M.W.S.) is designed for students from any discipline who have an appropriate background in Women's Studies. The objectives of the program are to provide students with advanced courses in a broad range of Women's Studies.
specialties and particularly in Women's Studies theories and methods; to equip students with the practical, theoretical and methodological skills to carry out independent research at the master's level; and to foster interdisciplinary approaches to the study of women and gender.

The program is administered by the Department of Women's Studies and the Graduate Studies Advisory Committee. The Graduate Co-ordinator, on behalf of the Department of Women's 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.

27.1 Master of Women's Studies Degree

The Degree of Master of Women's Studies is offered by full- or part-time study. Candidates may choose a thesis or non-thesis (project or internship) program. The program draws scholarly participation from faculty members in a range of academic disciplines within the School of Graduate Studies.

27.2 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 Women's Studies satisfactory to the Graduate Studies Advisory Committee.
2. Applicants who do not have an adequate background in Women's Studies may be required to complete Women's Studies 4000 or equivalent normally with a grade of 75% or higher.

27.3 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 two supervisors, normally from different disciplinary units. For students selecting the non-thesis option, one Supervisor will be selected.
2. All candidates are required to complete Women's Studies 6000, 6100, 6200 and 6300.
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 Women's Studies 6380, 6500 and/or from the block of special topics courses in Women's Studies 6400-6420.
4. Each student will be required to give a public seminar on her/his thesis research, project or internship after the thesis proposal has been approved and before submission of her/his final thesis/project/internship report.

27.4 Thesis

1. Candidates for the Degree of Master of Women's Studies (thesis option) will be required to complete a minimum of 15 credit hours. Candidates 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 candidate'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.

27.5 Project

1. Candidates for the Degree of Master of Women's Studies (project option) will be required to complete a minimum of 18 credit hours. Candidates 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 Women's Studies 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 50-70 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 candidate'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.

27.6 Internship

1. Candidates for the Degree of Master of Women's Studies (internship option) will complete a minimum of 18 credit hours. Candidates will also be required to complete an internship.
2. Internship placements 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 Women's 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 Women's Studies internships, the final decision regarding internship rests with the Head, Department of Women's 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 supervised by a Supervisory Committee of at least three members, including the candidate's Supervisor, the field Supervisor and Women's Studies Graduate Co-ordinator or her/his delegate.
6. The Supervisory Committee will meet with the intern and field instructor 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 candidate’s third semester in the program.

8. Regardless of the form that the internship takes, there must be a written internship report (35-50 pages). When the candidate completes the internship report, the Supervisory Committee will recommend to the Dean of Graduate Studies a grade of pass or fail. A candidate will be permitted to submit an internship report only after the Committee has determined that the internship placement has been fully completed.

9. Should the Head, Department of Women’s 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.

27.7 Courses
6000 Feminist Theory
6100 Epistemological and Methodological Approaches to Women’s Studies
6200 Graduate Seminar in Women’s Studies
6300 Feminism as Community
6380 Women, Nature, Science and Technology (cross-listed as Sociology 6380)
6400-6420 Special Topics in Women’s Studies
6500 Women and Communication Studies

28 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 Language and Literature, Environmental Science, Ethnomusicology, Experimental Psychology, Folklore, Food Science, Geography, History, Interdisciplinary, Linguistics, Management, Marine Biology, Mathematics, Medicine, Pharmacy, Physical Oceanography, Social Work, Sociology, Statistics and Theoretical Physics.

28.1 Anthropology
Associate Professor and Head of the Department
M. Tate

28.1.1 Program
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. Students will normally be required to successfully complete two courses during their first three semesters in the program: Anthropology 6300 and 6890. The supervisory committee may require the candidates to complete additional graduate courses.

6. All candidates 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 candidate’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. Candidates 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 candidate’s program.

8. The candidate must submit a written thesis proposal for presentation to the Department two months following completion of his/her comprehensive examination.

9. As stated in the General Regulations for Graduate Studies, the time limit for completion of the Degree is 7 years.


28.1.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow.

6010 Cultural Ecology
6071 Health and Illness: Cultural Contexts and Constructions
6081 Anthropology of Gender
2010-2011

6089 Anthropology of Underclass Life
6100 Social Organization
6110 Culture and Personality
6140 The Community
6210 Language and Culture
6240 Atlantic Regional Studies
6260 Social and Economic Development
6280 Newfoundland Ethnography
6281 Labrador Ethnography
6282 Ethnography of a Single Region
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)
6580-6599 Special Areas in Anthropology
6600 Contemporary Debates in Anthropology
6890 Graduate Seminar

28.2 Archaeology
Professor and Head of the Department
S. Brown

28.2.1 Program
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 candidates to complete additional graduate courses.
6. All candidates 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. Candidates 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 candidate’s program.
8. The candidate must submit a written thesis proposal for presentation to the Department two months following completion of his/her comprehensive examination.
9. As stated in the General Regulations for Graduate Studies, the time limit for completion of the Degree is 7 years.

28.2.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, 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 Palaeopatology
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 Special Topics in Archaeology and Prehistory
6700 Interpretative Methods in Archaeology
6701 Interpretative Methods in Historical Archaeology
6890 Graduate Seminar
28.3 Biochemistry

Professor and Head of the Department
M. Mulligan

28.3.1 Program

1. The Degree of Doctor of Philosophy is offered in Biochemistry or Food Science to full-time and part-time students.
2. The admission requirements for the graduate programs in Biochemistry and Food Science are as given under General Regulations. Depending on the background and/or area of specialization, a candidate's program may include additional courses taken for credit in Biochemistry, Food Science or related subjects.
3. The program of a candidate 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.
4. It is the responsibility of the student to arrange regular meetings with his or her 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.
5. All candidates for the Ph.D. Degree shall be required to attend and participate in Departmental seminars.
6. A candidate for the Ph.D. will be required to present a seminar on his/her research area within 18 months of starting the program and again immediately prior to the submission of thesis.

Additional Regulations for Each Program

Biochemistry (Additional)

7. A candidate for the Ph.D. in Biochemistry shall normally take the Comprehensive Examination within the first seven semesters of his or her 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 candidate’s program.

Food Science (Additional)

8. A candidate for the Ph.D. Degree in Food Science shall be required to take the comprehensive examination normally within three semesters of his/her enrolment in the doctoral program and under no circumstances later than six semesters. The examination shall consist of two parts:
   a. A written examination covering the following areas of food science.
      Food Chemistry
      Food Processing
      Food Microbiology and Biotechnology
      Biochemical and Food Engineering
      Food Analysis
      Nutrition Fundamentals
   b. The candidate shall be required to defend orally an assigned research topic that may be related to his/her area of concentration.
      The candidate shall be required to provide a written submission of the research topic to the examination committee at least three weeks before the date of the oral examination. The comprehensive examination committee shall examine the candidate orally on any or all aspect(s) of the research topic and the written examination.
   c. In order to pass the comprehensive examination, the candidate is required to pass both the written and oral segments.

28.3.2 Courses

A series of advanced courses in the areas outlined below will be offered. Normally only one course will be offered per semester.

6200 Current Biochemical Research Topics I
6210 Current Biochemical Research Topics II
6400 Control of Intermediary Metabolism
6410 Molecular Endocrinology
6420 DNA: The Structure and Function of Genes (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6421 RNA: Structure, Function and Synthesis (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6422 Regulation of Protein Synthesis (Prerequisite: An introductory course in molecular biology, or its equivalent, at the senior undergraduate level, e.g., Biochemistry 4100)
6430 Bioenergetics
6440 Membranes
6450 Proteins
6500 Enzymology
6520 Nutritional Biochemistry
6530 Food Biochemistry
6590 Molecular Biology I (cross-listed as Biology 6590 and Medicine 6590) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6591 Molecular Biology II (cross-listed as Biology 6591 and Medicine 6591) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
6592 Bacterial Genetics (cross-listed as Biology 6592) Prerequisite: Biology 4241 or Biochemistry 4100 (or equivalent)
6593 Selected Readings in Molecular Biology (cross-listed as Biology 6593) Prerequisites or Co-requisites: Biology 6590, 6591/Biochemistry 6590, 6591/Medicine 6590, 6591 (or equivalent)
6600 Metabolic Toxicology
6610 Comparative Biochemistry
6620 Biochemical Adaptation
6630 Marine Biochemistry
6640 Biochemistry of Cancer
6650 Science and Technology of Seafoods
6660 Industrial Microbiology
6670 Biological Waste Treatment
6680 Processing and Quality of Foods
28.4 Biology

Associate Professor and Head of the Department
P. Marino

The Degree of Doctor of Philosophy is offered in Biology to full-time and part-time students in Biology and Marine Biology. Students interested in animal behaviour should also consult the section in the Calendar describing the Doctoral programs Cognitive and Behavioural Ecology.

28.4.1 Biology

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 candidate 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 candidate'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 candidate 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.
      ii. The procedure shall be initiated by the candidate's Supervisor who will notify the Department of Biology, in writing, of the candidate's readiness. Failure to meet the above requirement can result in the candidate 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 candidate'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 candidate's presentation and response to questions put to him/her 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 candidate. 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 candidate and his or her 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 candidate will be informed of the topic and format four to six weeks prior to the examination. The examination will follow the procedure outlined in 8.c and 8.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.

28.4.2 Marine Biology

1. A program of study leading to a Doctor of Philosophy with a specialization in Marine Biology is governed by the above regulations.
2. To be considered for admission, applicants must have a background equivalent to that provided by the M.Sc. specialization in Marine Biology.
3. A student will be required to take Biology 7000 (Graduate Core Seminar) and 6 credit hours in Biology courses from the following group 6710, 7531, 7535, 7540, 7541, 7551, 7560, and 7561.
4. Normally students will be required to take 6 credit hours in Biology courses from the following group: 6710, 7531, 7535, 7540, 7541, 7551, 7560 and 7561.
5. Depending on the student's area of research and background additional courses may be required.

28.4.3 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

- 6000 Research Topics in Microbiology
- 6100 Modern Problems in Botany
- 6110 Advanced Phycology
- 6130 Behavioural Ontogeny (Cross-listed as Psychology 6350)
- 6351 Behavioural Ecology and Sociobiology (Cross-listed as Psychology 6351)
- 6355 Field Course in Animal Behaviour (Cross-listed as Psychology 6355)
- 6400 Parasitic Protozoology
- 6410 Helminthology
- 6420 Parasitic Arthropods

- 6590 Molecular Biology I (Cross-listed as Biochemistry 6590 and Medicine 6590) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
- 6591 Molecular Biology II (Cross-listed as Biochemistry 6591 and Medicine 6591) Prerequisites: Biology 4241, Biochemistry 4100 (or equivalent)
- 6592 Bacterial Genetics (Cross-listed as Biochemistry 6592) Prerequisite: Biology 4241 or Biochemistry 4100 (or equivalent)
- 6593 Selected Readings in Molecular Biology (Cross-listed as Biochemistry 6593) Prerequisites or Co-requisites: Biology 6590, 6591/Biochemistry 6590, Medicine 6590, 6591, (or equivalent)

- 6700 Biology of the Molluscs
- 6710 Marine Benthic Biology
- 6900 Entomology
- 6910 Applied Entomology
- 7000 Graduate Core Seminar
- 7101 Topics in Marine Biology
- 7110 Cellular Physiology and Cytology
- 7140 Physiology of Parasitism
- 7201 Topics in Cellular and Molecular Biology and Physiology
- 7210 Arctic and Subarctic Biology
- 7220 Quantitative Methods in Biology
- 7250 Topics in Wildlife Biology
- 7270 Ecology of Newfoundland
- 7300 Ornithology
- 7301 Topics in Ecology and Conservation Biology
- 7510 Ichthyology
- 7520 Advances in Fish Biology
- 7530 The Molecular Basis of Development
- 7531 Biological Oceanography
- 7535 Research Methods in Marine Science
- 7540 Plankton Dynamics
- 7541 Physiological Ecology of Phytoplankton
- 7550 Fishery Biology
- 7551 Fisheries Resource Management
- 7560 Physiology of Marine Invertebrates
- 7561 Physiology of Marine Vertebrates
- 7570 Marine Benthic Biology
- 7600 Effect of Organic and Inorganic Pollutants on Biological Systems
- 7910 Community and Ecosystem Ecology
- 7920-7960 Special Topics in Biology

28.5 Chemistry
Professor and Head of the Department
P. Pickup

28.5.1 Program
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. Candidates are normally required to write American Chemical Society (ACS) placement test(s) in the first two weeks of the initial semester of registration in order to determine an appropriate course program.
2. Candidates 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 candidate 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 candidate's program, and, in consultation with the student, to prepare annual written progress reports for submission to the Dean of Graduate Studies.
4. Candidates 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 Departmental seminar on a topic not directly related to the candidate's research (Chemistry 6002) as well as a seminar describing the candidate's research (Chemistry 6003). Courses taken towards a Master's Degree may not be repeated. Candidates 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 6002 and 6003.
5. Candidates are required to attend Departmental seminars.
6. Candidates must pass a comprehensive examination, as described in the General Regulations, consisting of a three-hour written part covering topics in a chosen branch of Chemistry and, subsequent to the written exam at the discretion of the comprehensive examination committee, an oral exam designed to explore areas of perceived deficiency.
7. Candidates must submit and successfully defend a thesis deemed acceptable by two internal and one external examiner as outlined in the General Regulations.

28.5.2 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)
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
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
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 Computational Chemistry
6600 Applications of Inorganic and Organometallic Chemistry to Toxicology

28.6 Cognitive and Behavioural Ecology

Administrative Committee
Dr. A. Storey, Department of Psychology - Chair
Dr. R. Anderson, Department of Psychology
Dr. T. Chapman, Department of Biology
Dr. I. Fleming, Ocean Sciences Centre
Dr. E. Miller, Department of Biology
Dr. W. Montevecchi, Department of Psychology
Mr. P. Regular, Graduate Student Representative
Dr. I. Warkentin, Sir Wilfred Grenfell College

28.6.1 Program

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 and Psychology, the Ocean Sciences Centre, the Faculty of Medicine and the Environmental Science Program at Sir Wilfred Grenfell College, 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 candidate. Students in Cognitive and Behavioural Ecology are considered for teaching assistantships in the Psychology or Biology Departments.
28.6.2 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 should be taken during the first year of the program. An Examination Committee will be struck in accordance with General Regulations. At least one member of the Department of Biology and of the Department of Psychology (other than the Supervisor) must be on the Examination Committee. The candidate's Supervisor will be on the Examination Committee and will be the only examiner from the candidate's Thesis Supervisory Committee. The Head of the Department of the Supervisor or his/her delegate is invited to serve on the Comprehensive Examination Committee. The Examination Committee is chaired by the Chair of the Cognitive and Behavioural Ecology Committee. The examination will include a comprehensive, integrative review paper on a research topic in Animal Behaviour. 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 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 candidate about the paper, the topic and its broader relationship with Cognitive and Behavioural Ecology.

28.6.3 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 Behavioral Ecology

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<thead>
<tr>
<th>Present Course</th>
<th>Former Course</th>
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<tbody>
<tr>
<td>CABE 6240</td>
<td>Biopsychology 6240</td>
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<td>CABE 7000</td>
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28.7 Computer Science

Professor and Head of the Department
W. Banzhaf

The degrees of Master of Science and Doctor of Philosophy are offered in Computer Science.

28.7.1 Doctor of Philosophy

1. Admission into the Ph.D. program in Computer Science is normally restricted to candidates 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 candidate 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 candidate 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.

28.7.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

Programming Languages
6711 Syntax and Semantics of Programming Languages
6712 Compiling Techniques
6713 Software Engineering
6714 Functional Programming
6715 Logic Programming
6716 Concurrent Programming
6718-6719 Special Topics in Programming Languages

Computer Systems
6720 Distributed and Parallel Computing
6721 Operating Systems Design
6722 Advanced Computer Architectures
6723 Microprocessor Systems
6724 VLSI Design (same as Engineering 9863)
6725 Computational Aspects of VLSI (same as Engineering 9864)
6726 Modelling and Analysis of Computing Systems
28.8 Earth Sciences

Professor and Head of the Department
J.M. Hanchar

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.

28.8.1 Doctor of Philosophy

1. Admission into a Ph.D. program in Earth Sciences (Geology) and Earth Sciences (Geophysics) is normally restricted to candidates holding a Master's Degree or its equivalent. Candidates 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 candidate 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 candidate can demonstrate, to the satisfaction of the Department of Earth Sciences, his/her ability to pursue research at the doctoral level.

2. A candidate for 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 candidate 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 in the first semester of registration in the Ph.D. program.

4. The Ph.D. Thesis Proposal Examination shall normally be taken in the second semester of registration in the Ph.D. program.

5. 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.

6. The Supervisor and the Head of the Department may recommend to the Dean of Graduate Studies that the program of a candidate who is not making satisfactory progress be terminated, in accordance with General Regulation, Termination of a Graduate Program.

7. A candidate is required to give an oral presentation to the Department on the results of his/her research. The presentation must be given during the second or third year of the program.

28.8.2 Courses

A selection of courses will be offered to meet the requirements of candidates as far as the resources of the Department will allow.

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)

General Courses
6070 Quantitative Techniques in Mineralogy and Metamorphic Petrology
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
28.9 Education

Associate Professor and Dean
D. Dibbon

Associate Professor and Associate Dean
T. Seifert

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 candidates, 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.

28.9.1 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.

28.9.2 Supervisory Committee

Each candidate 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.

28.9.3 Components of Study

1. Courses
   a. Students are required to successfully complete two courses on the doctoral program.
      Education 7001 - Doctoral Seminar in Education: Area of Specialization
      Education 7002 - Advanced Educational Research
   b. Based on a consideration of educational background and research interest, students may be required to complete (or have completed at the masters level) as many as two (2) additional courses in research related to their program focus and specialty.
   c. Normally, no more than four courses may be undertaken on a candidate's program.
   d. Education 7003-30 - Special Topics (offered as required)

2. Comprehensive Examination

   The candidate 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 candidate in a Ph.D. program in Education shall normally take the written Comprehensive Examination prior to the seventh semester of the program. The candidate will have completed required courses prior to taking the Comprehensive Examination. In preparation for the Comprehensive Examination, the doctoral candidate, with the guidance of the candidate's Supervisor, will undertake study of the sub-disciplines/areas of concentration identified by the candidate and supervisory committee and approved by the Doctoral Committee. Normally, these will include the candidate'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 candidate and the supervisory committee will agree on the topics to be examined. The examination will be written over a two day 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 candidate's Supervisor who will notify, in writing, the Dean of Education of the candidate's readiness. The date of both the written examination and the oral examination will be determined by the Dean of Education. The candidate 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
28.10.3 Regulations for Ph.D. Comprehensive Examination

**Timing**

The Comprehensive Examination for Ph.D. candidates in the Faculty of Engineering and Applied Science shall be conducted in two parts: I) General Examination and II) Examination of the Research Proposal. A candidate registered full-time in the Ph.D. Program shall normally take Part I of the exam within four semesters of the start of their program and Part II within six semesters.Part-time students will normally take Part I of the exam within four semesters of the start of their program and Part II within seven semesters. Students transferring from a Master of Engineering program will normally complete both parts within seven semesters of the start of their Master of Engineering program.

The Examination Committee shall be appointed by the Dean of Graduate Studies on the recommendation of the Dean of Engineering and Applied Science. There will be six members of the Comprehensive Examination Committee as follows:

- Chairperson of the Supervisory Committee
- Second member of candidate's supervisory committee
- Member of the Faculty of Education or educational community selected by the Dean of Education.

In the event that the Chairperson of the Supervisory Committee is the candidate's Supervisor, the Dean of Education shall appoint an additional member.

3. Ph.D. Thesis Regulations

a. The candidate must submit a thesis proposal based on his/her 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 candidate within one month of its acceptance, rejection or acceptance with recommended changes.

b. If the proposal is not acceptable, the candidate 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 candidate's program.

c. The thesis shall give evidence of the candidate'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 candidate will be required to present a seminar on her/his 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.

28.9.4 Courses

- 7001 Doctoral Seminar in Education: Area of Specialization
- 7002 Advanced Educational Research
- 7003-30 Special Topics

28.10 Engineering and Applied Science

Professor and Dean, Pro Tempore

J. Quaicoe

Professor and Associate Dean (Graduate Studies)

L. Lye

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, and Oil and Gas Engineering.

28.10.1 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 candidates 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.

28.10.2 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.
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 fulfillment 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.
and Applied Science, normally within three semesters of the start of the student’s program.

Examination Procedure
Part I General Examination is an oral examination of the candidate’s mastery of selected sub-disciplines of Engineering and Applied Science related to their area of research. The candidate will be apprised of the sub-disciplines in writing no later than three months prior to the examination. The examination is open to the University community; however, only members of the Committee are permitted to ask questions. The Committee may make four recommendations following this examination: I) the candidate may proceed to Part II of the Comprehensive Examination, ii) the candidate may proceed to Part II but will be assigned additional course work to their program of study, iii) the candidate will be assigned additional study materials and redo Part I in 2 to 8 weeks, iv) the candidate fails. Part I may only be redone once and failing Part I means that the Comprehensive Examination is failed without proceeding to Part II.

Part II Examination of the Research Proposal shall consist of i) a research proposal, normally of 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 ii) a 20 to 30 minute presentation. The candidate should submit the written proposal at least one month prior to the presentation which is open to the University community and will be followed by questions from the Committee and the audience.

Committee Recommendations
Following Part II, the Examination Committee will meet in camera to decide a final recommendation for the Committee Chair to forward to the Dean of Graduate Studies. The possible recommendations in accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination are “pass with distinction”, “pass”, “re-examination” or “fail”.

28.10.4 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.

28.11 English Language and Literature
Associate Professor and Interim Head of the Department
L.F. Balish

The degrees of Master of Arts and Doctor of Philosophy are offered in English Language and Literature.
Candidates for the M.A. in English may complete the program as either part-time or full-time students. Candidates for the Ph.D. in English must be in attendance as full-time students for at least three semesters of the program.

28.11.1 Doctor of Philosophy
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 candidates will be required to complete 15 credit hours in graduate courses. These courses will be selected by the candidate in consultation with the candidate’s supervisory Committee. While candidates 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. Candidates 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. Candidates 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. Candidates 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 candidate no later than one month after receiving it.
6. Reading knowledge of a second language will be required of all candidates. 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 is a written examination prepared by the candidate’s Comprehensive Examination Committee. In accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination, the candidate’s Comprehensive Examination Committee will include the Head (or the Head’s delegate, usually the Graduate Co-ordinator), the candidate’s Supervisor, and three other members of the Department. The written examination shall consist of three parts: a four-hour examination in the student’s area of concentration and two three-hour examinations in two other specified areas. In accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination, the examination shall take place before the end of the seventh semester.

Candidates will be graded “pass with distinction”, “pass”, “re-examination”, or “fail”, in accordance with General Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination. 4. Candidates 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 candidate’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.
28.11.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates, 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.

5900 Bibliography and Research Methods
6403 Etymology (same as Linguistics 6403)
6420 English Dialectology I
6421 English Dialectology II
6999 Master’s Essay (for non-thesis students)
7003 Trends in Contemporary Critical Theory
7004 English Phonology and Morphology
7005 The Syntactic Structure of English
7032 Studies in Old English I
7033 Studies in Old English II
7034 Studies in Middle English I
7035 Studies in Middle English II
7036 Studies in Middle English III
7037 Studies in 16th-Century Literature I
7038 Studies in 16th-Century Literature II
7039 Studies in 16th-Century Literature III
7040 Studies in 16th-Century Literature IV
7041 Studies in 17th-Century British Literature I
7042 Studies in 17th-Century British Literature II
7043 Studies in 17th-Century British Literature III
7044 Studies in 17th-Century British Literature IV
7045 Studies in 18th-Century British Literature I
7046 Studies in 18th-Century British Literature II
7047 Studies in 18th-Century British Literature III
7048 Studies in 18th-Century British Literature IV
7049 Studies in 19th-Century British Literature I
7050 Studies in 19th-Century British Literature II
7051 Studies in 19th-Century British Literature III
7052 Studies in 19th-Century British Literature IV
7053 Studies in 20th-Century British Literature I
7054 Studies in 20th-Century British Literature II
7055 Studies in 20th-Century British Literature III
7056 Studies in 20th-Century British Literature IV
7057 Studies in Pre-19th Century American Literature
7058 Studies in 19th Century American Literature I
7059 Studies in 19th Century American Literature II
7060 Studies in 19th Century American Literature III
7061 Studies in 20th Century American Literature I
7062 Studies in 20th Century American Literature II
7063 Studies in 20th Century American Literature III
7064 Studies in 20th Century American Literature IV
7065 Studies in Pre-19th Century Canadian Literature
7066 Studies in 19th Century Canadian Literature I
7067 Studies in 19th Century Canadian Literature II
7068 Studies in 19th Century Canadian Literature III
7069 Studies in 20th Century Canadian Literature I
7070 Studies in 20th Century Canadian Literature II
7071 Studies in 20th Century Canadian Literature III
7072 Studies in 20th Century Canadian Literature IV
7073 Studies in Newfoundland Literature I
7074 Studies in Newfoundland Literature II
7075 Studies in Newfoundland Literature III
7076 Studies in Anglo-Irish Literature I
7077 Studies in Anglo-Irish Literature II
7078 Studies in Modern Drama
7079 Studies in Post-Colonial Literature I
7080 Studies in Post-Colonial Literature II
7081 Studies in Post-Colonial Literature III
7082 Studies in Critical Theory I
7083 Studies in Critical Theory II
7084 Studies in Critical Theory III
7085 Special Readings in English I
7086 Special Readings in English II
7087 Special Readings in English III
7020-25 Special Topics in English
28.12 Environmental Science

Board of Study
Dr. J. Wroblewski, Ocean Sciences Centre - Chair
Dr. C. Campbell, Sir Wilfred Grenfell College
Dr. B. Chen, Faculty of Engineering and Applied Science
Dr. R. Chuenpagdee, Department of Geography
Dr. P. Marino, Head, Department of Biology
Dr. W. Montevecchi, Department of Psychology
Dr. L. Tarasov, Department of Physics and Physical Oceanography
Dr. S. Ziegler, Department of Earth Sciences

28.12.1 Program

1. The Environmental Science Graduate Program focuses on interdisciplinary research. Supervisors include faculty from all Departments in the Faculty of Science and the Ocean Sciences Centre, the Department of Geography, the Faculty of Engineering and Applied Science, the Faculty of Medicine, and the Environmental Science Program at Sir Wilfred Grenfell College, as well as adjunct faculty from the Department of Fisheries and Oceans.

2. The Board of Study is responsible for the Program. Board members are appointed by the Dean of Science, on the recommendation of the Chair of the Board. The Board chair is elected by the members of the Board of Study and appointed by the Dean of Science. The Board 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 and examiners, students' annual progress. Upon program completion, the Board certifies that all requirements for the appropriate degree have been met. The department of the supervisor ensures that adequate facilities are provided for each candidate. Students in Environmental Science are considered for teaching assistantships in the Faculty of Science and the Department of Geography.

An 'Oversight Board' will be established, consisting of Deans or designates from participating Faculties, and the Dean of Graduate Studies.

28.12.2 Doctor of Philosophy

1. There are three required courses for the doctoral program. All students take ENVS 6010 and those with a disciplinary Master's degree in Science from a recognized university take ENVS 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 Study.

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 Study must be on the Examination Committee. The candidate's supervisor will be on the Examination Committee and will be the only examiner from the candidate's Thesis Supervisory Committee. The Head of the Department of the Supervisor or his/her 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 candidate about the paper, the topic and its broader relationship with Environmental Science.

3. The most important requirement is the writing of the doctoral thesis. The research 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 candidate 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.

28.12.3 Courses

6000 Environmental Science and Technology
6001 Earth and Ocean Systems
6002 Environmental Chemistry and Toxicology
6003 Applied Ecology
6004 Environmental Pollution and Mitigation
6005 Environmental Sampling and Pollutant Analysis
6007 Environmental Risk Assessment
6010 Environmental Seminar
6201-6209 Selected Topics in Environmental Science

28.13 Ethnomusicology

Professor and Director
E. Waterman

Associate Professor and Associate Director
M. Cheramy

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.

28.13.1 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 musical details on the basis of aural and/or written sources, as appropriate to that tradition.

Candidates 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. Candidates 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).

28.13.2 Program Requirements

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 6010, 6030.
   b. ONE of Music 6002 or Folklore 7100.
   c. Nine 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.
   d. 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.

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 his/her 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 candidate's ability to carry out original and independent research, develop the necessary theoretical and methodological framework, and present the findings in a scholarly manner.

28.13.3 Courses

Theories and Methods:
Music 6001 Research Methods
Music 6002 Graduate Seminar
Music 7001 Research Problems and Methods in Ethnomusicology
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 Folktales
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
28.14 Folklore

Associate Professor and Head of the Department
D. Tye

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.

28.14.1 Doctor of Philosophy

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. Candidates 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 candidate will be reviewed.

3. Second Language Requirements:
   a. All Ph.D. candidates 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. Candidates 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 closed book examinations each of eight hours duration. The Committee will recommend to the Dean of Graduate Studies a grade of PAS (pass), FAL (fail), or PWD (pass with distinction).
   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 candidate’s completion of courses.

5. Ph.D. Thesis:
   a. The candidate will normally submit a thesis proposal based on his/her own interests no later than the end of the fourth semester of the program. 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 candidate 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 candidate’s ability to carry out independent and original research, develop the necessary theoretical and methodological framework and present the findings in a scholarly manner.

28.14.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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
- 6581 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
- 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.

28.15 Food Science
See Biochemistry.

28.16 Geography
Associate Professor and Head of the Department
C. Mather

28.16.1 Doctor of Philosophy
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 candidate 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 candidate 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. Candidates 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 candidates 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 candidates are required to successfully complete a minimum of 3 credit hours in graduate program courses.
6. The supervisory committee may decide that a candidate successfully completes an examination for reading or speaking a language other than English.
7. After the successful completion of all required courses, candidates must take a comprehensive examination which will have both a written and an oral component.
8. Following successful completion of the comprehensive examination the candidate 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 candidate.
9. Each candidate 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.

28.16.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates 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

28.17 Geology
See Earth Sciences.
28.18 Geophysics
See Earth Sciences.

28.19 History
Professor and Head of the Department
C. Youé

The degrees of Doctor of Philosophy and Master of Arts are offered in History by full-time or part-time study.

28.19.1 Doctor of Philosophy
1. The Ph.D. Degree in History is offered in the following areas:
   a. Canadian History
   b. Maritime History
   c. Newfoundland History

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. All candidates must successfully complete History 7000 and 7001 in the first year of the program. The Supervisory Committee may require the candidate to complete additional graduate courses.

4. All candidates 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. Candidates 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. This reading will prepare the student for the comprehensive oral examination.

6. Candidates must submit a thesis proposal, deemed acceptable by the Supervisory Committee, to the Department before sitting the comprehensive examination.

7. Candidates will normally sit the comprehensive oral examination in the second year of the program.

8. Interested applicants are urged to consult with the Head of the Department on these prerequisites and other requirements before filing an application for admission.

28.19.2 Courses
A selection of the following graduate courses will be offered to meet the requirements of candidates 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 I
- 6999 Masters Research Paper (12 credit hours)
- 7000 Ph.D. Seminar I
- 7001 Ph.D. Seminar II

28.20 Interdisciplinary
Associate Professor and Director
S. MacKinnon

The 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.

28.20.1 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).

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, the development of a research proposal, and the thesis-writing and final examination.

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 primary Supervisor.

28.20.2 Deadlines for Applications
1. The deadline for Fall admission is March 1 for commencement in September, October 1 for commencement in January, and February 1 for commencement in May. Students seeking admission to the program should start preparing their admission file well in advance of the application deadline.

Admissions shall be considered by the ID Ph.D. Committee and recommendations shall be made to the Dean of Graduate Studies.

28.20.3 Admission
1. Prospective students should normally hold a Master’s Degree and have an excellent academic record. Applications for admission must include:
   a. Three 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 faculty members, one of whom is prepared to assume the role of academic Supervisor or co-supervisor and at least one whose unit of primary responsibility is a Ph.D. granting Department.
   d. Letters of endorsement from the administrative heads of each of the units involved in the proposed program.
   e. A statement from the University Librarian indicating the adequacy of Library resources to satisfy the demands of the research program.

28.20.4 Program of Study
1. 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. 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. Comprehensives

The scope, format, and number of required comprehensive examinations shall be determined by the Supervisory Committee in consultation with the student and in accordance with the needs of his/her particular program of study. Students will be required to take a comprehensive examination after the completion of all required course work, which can be no later than the end of the seventh semester of study. Comprehensive examinations shall follow procedures in accordance with General Regulation, Comprehensive Examinations, Ph.D. Comprehensive Examination, with the exception of 2.

3. Thesis
   a. A thesis proposal, including a working title, statement of purpose and research scope, outline of theoretical and methodological approach, working plan and preliminary bibliography must be submitted to the Supervisory Committee no later than the end of the fifth semester of study. If approved by the Committee, the proposal shall be recommended to the ID Ph.D. Committee for final approval.
   b. Students must complete a thesis, examined and defended in accordance with General Regulation, Theses and Reports of the School of Graduate Studies. The thesis shall give evidence of the candidate’s ability to develop independent and original research.

28.21 Linguistics
Professor and Head of the Department
M. MacKenzie

The degrees of Master of Arts and Doctor of Philosophy are offered in Linguistics.

28.21.1 Doctor of Philosophy
1. The Degree of Doctor of Philosophy is offered in the following areas:
   a. Languages in which the Department has demonstrated expertise, especially languages of the Newfoundland and Labrador Area.
   b. Historical and Comparative Linguistics.
   c. 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 candidate 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. Candidates who fulfill the requirement in Clause 2 and who otherwise possess the qualifications of Ph.D. candidates will embark on a program approved on an individual basis. This will normally include not less than 18 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. Comparative and Historical Linguistics

d. Dialectology and Sociolinguistics

6. The comprehensive examination (see Regulation Comprehensive Examinations, Ph.D. Comprehensive Examination of the General Regulations) includes two written and two oral examinations. Students must meet all language requirements prior to undertaking their comprehensive examination.

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, candidates 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 candidate 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. 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, candidates 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 candidate's first language will be required, as demonstrated by a minimum B grade in a second-year language course, 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.

28.21.2 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. 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: 6150)

6200 Generative Phonology

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.
28.22 M.D.-Ph.D.

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 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.

28.22.1 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.

28.22.2 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.

28.22.3 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.

28.22.4 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.

28.23 Management

Professor and Dean
W. Zerbe

Associate Professor and Associate Dean (Academic Programs)
T. Clift

Professor and Associate Dean (Research)
J. Parsons

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: (i) operations and information management, and (ii) organizational behaviour and human resources management.

The Degree of Doctor of Philosophy in Management is offered by full-time study to qualified candidates. The General Regulations of the School of Graduate Studies and the Degree Regulations of the Faculty of Business Administration outlined below, will apply.

28.23.1 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, applicants must have completed the GMAT with a minimum score of 600 (or GRE with a combined score of 1100).

28.23.2 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 candidate 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.

### 28.23.3 Components of Study

#### 28.23.3.1 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 Ph.D. Admission Committee when a student is accepted into the program.

1. **Required for all Specializations**  
   - Philosophy 6015 Theory of Knowledge  
   - Business 9901 Approaches to Management Research

2. **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.

3. **Graduate Research Integrity Program (non-credit)**  
   *Alternatively, students may elect to take Education 6467 if Business 9903 is not offered in a particular year, on the approval of the Ph.D. Program Director.
   **Alternatively, students may elect to take Education 6466 if Business 9904 is not offered in a particular year, on the approval of the Ph.D. Program Director.

**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:

- 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 991A/B Seminar in Operations and Information Management Research A/B  
- Business 9917 Special Topics in Operations Management  
- Business 9918 Special Topics in Information Systems

**Recommended Sequence for Operations and Information Management (OIM) Specialization Table**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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| Year 1, Fall   | Philosophy 6015 Theory of Knowledge  
|                | BUSI 9901 Approaches to Management Research  
|                | BUSI 9910 Optimization  
|                | BUSI 9911 Data and Process Models in Information Systems Development   |
| Year 1, Winter | BUSI 9902 (Modelling), 9903 (Quantitative), or 9904 (Qualitative) Methods in Management Research  
|                | BUSI 9912 Probabilistic Models  
|                | BUSI 9913 Human-Computer Interaction and Decision Support Systems  
|                | Graduate Research Integrity Program (non-credit)                       |
| Year 1, Spring | Summer Research Project                                                 |
| Year 2, Fall   | BUSI 9914 Supply Chain: Models and Management                           |
|                | BUSI 9915 Electronic Commerce                                           |
|                | BUSI 991A Seminar in Operations and Information Management Research (Part A)  
|                | Graduate Program in Teaching (Recommended (non-credit))                 |
| Year 2, Winter | BUSI 991B Seminar in Operations and Information Management Research (Part B)  
|                | BUSI 9917 Special Topics in Operations Management                        |
|                | BUSI 9918 Special Topics in Information Systems                         |

**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 9922 Foundations in Industrial Relations  
   - Business 9923 Foundations in Organization Theory  
   
   **Note:** Waivers shall not be granted in the Ph.D. program for previously completed course work at either the undergraduate or master’s level.

2. **Four of:**  
   - Business 9924 Current Issues in Organizational Behaviour  
   - Business 9925 Current Issues in Human Resources Management  
   - Business 9926 Current Issues in Industrial Relations  
   - Business 9927 Current Issues in Organizational Theory  
   - Business 9928 Special Topics in Organizational Behaviour/Organization Theory
Any other graduate course subject to the approval of the Supervisor

Recommended Sequence for Organizational Behaviour and Human Resources Management Specialization Table

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Year 1, Fall</td>
<td>Philosophy 6015 Theory of Knowledge</td>
</tr>
<tr>
<td></td>
<td>BUSI 9901 Approaches to Management Research</td>
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<tr>
<td></td>
<td>BUSI 9920 Foundations of Organizational Behaviour</td>
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<tr>
<td></td>
<td>BUSI 9921 Foundations of Human Resources Management</td>
</tr>
<tr>
<td>Year 1, Winter</td>
<td>BUSI 9902 (Modelling), 9903 (Quantitative), or 9904 (Qualitative) Methods in Management Research</td>
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<tr>
<td></td>
<td>BUSI 9922 Foundations of Industrial Relations</td>
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<tr>
<td></td>
<td>BUSI 9923 Foundations of Organization Theory</td>
</tr>
<tr>
<td></td>
<td>Graduate Research Integrity Program (non-credit)</td>
</tr>
<tr>
<td>Year 1, Spring</td>
<td>Summer Research Project</td>
</tr>
<tr>
<td>Year 2, Fall</td>
<td>Two of: BUSI 9924, 9925, 9926, 9927, 9928, 9929** or any other graduate course subject to the approval of the Supervisor</td>
</tr>
<tr>
<td></td>
<td>Graduate Program in Teaching (Recommended (non-credit))</td>
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<tr>
<td>Year 2, Winter</td>
<td>Two of: BUSI 9924, 9925, 9926, 9927, 9928, 9929** or any other graduate course subject to the approval of the Supervisor</td>
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** Offerings subject to scheduling

28.23.3.2 Summer Research Project
During the first semester 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 in the course BUSI 991B Seminar in Operations and Information Management Research during the second year of the program or an equivalent course in other specializations.

28.23.3.3 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 candidate 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 candidate 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. 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.

28.23.3.4 Ph.D. Thesis Regulations
1. The candidate must submit a thesis proposal to all members of the Supervisory Committee for evaluation and approval by the end of the eighth semester of the program. Within one month of submitting the proposal, the Candidate 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 candidate 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 candidate’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.

28.24 Mathematics and Statistics
Professor and Head of the Department
C. Radford

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.
28.24.1 Doctor of Philosophy

The following regulations should be read in conjunction with the General Regulations of the School of Graduate Studies.

1. Candidates 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 candidate shall complete at least 6 credit hours in graduate courses in the area of specialization. Candidates not holding a Masters Degree shall, in addition, complete, or have already completed successfully, the course requirements for a Memorial University of Newfoundland Master's Degree in mathematics or in statistics, as appropriate. Any candidate may be required to take additional courses.

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 as soon as the Supervisory Committee deems appropriate, but not later than the end of the candidate's third semester in the doctoral program. Its main purpose is to ensure that the candidate has a reasonably broad general knowledge of mathematics or of statistics, as appropriate.

   b. The intermediate review consists of an oral presentation on the candidate’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 candidate’s seventh semester in the doctoral program. Its purpose is to ensure that the candidate has specialized knowledge in his/her 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.

28.24.2 Specific Regulations for the Ph.D. in Mathematics

A Master's Degree in mathematics 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 mathematics may be considered for direct admission into the Ph.D. program. Students currently registered in Memorial University of Newfoundland’s M.Sc. program in mathematics may request a transfer into a Ph.D. program. Such transfer must be supported by the intended Ph.D. supervisory committee and the Graduate Studies Committee.

28.24.3 Specific Regulations for the Ph.D. in Statistics

A Master's Degree in statistics from a recognized university is normally required for entry into the Ph.D. program. Students currently registered in Memorial University of Newfoundland’s MAS or M.Sc. program in statistics may request a transfer into a Ph.D. program. Such transfer must be supported by the intended Ph.D. supervisory committee and the Graduate Studies Committee.

In addition to general Departmental requirements, each candidate for the Ph.D. in statistics will be required to present at least one paper at a graduate seminar on a topic to be approved by his or her Supervisor.

Table of Credit Restrictions for Present Mathematics Courses with Former Mathematics Courses

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28.24.3.1 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

Mathematics

6100 Dynamical Systems
6101 Modern Perturbation Theory
6104 Infinite Dimensional Dynamical Systems
6102-6119 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
6202-6209 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
6300 Algebraic Topology I (Homology Theory)
6301 Algebraic Topology II (Homotopy Theory)
6302 Algebraic Topology III (Theory of Fibre Bundles)
6304-6309 Special Topics in Topology
6310 Functional Analysis
6311 Complex Analysis
6312 Measure Theory
6313-6319 Special Topics in Analysis
6320 Group Theory
6321 Ring Theory
School of Graduate Studies

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
6910 Topology Seminar
6940 Analysis Seminar
6950 Algebra Seminar

Statistics
6503 Stochastic Processes
6505 Survival Analysis
6510 Mathematical Statistics
6520 Linear Models
6530 Generalized Linear Longitudinal Mixed Models
6540 Time Series Analysis
6545 Statistical Computing
6550 Nonparametric Statistics
6560 Continuous Multivariate Analysis
6561 Categorical Data Analysis
6570-6589 Selected Topics in Statistics and Probability
6590 A Course in Statistical Consulting
6930 Statistics Seminar

28.24.4 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

28.25 Medicine

Professor and Dean
J. Rourke

Professor and Associate Dean
P. Moody-Corbett

Professor and Assistant Dean
D. McKay

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.

28.25.1 Doctor of Philosophy

28.25.1.1 Qualifications for Admission

The admission requirements for the Ph.D. are as given under the General Regulations governing Ph.D. degrees.

28.25.1.2 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 candidate’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.

28.25.1.3 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.
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. The faculty participating in the program consists of basic cardiovascular scientists and renal clinicians. Teaching within the program is integrated with the M.D. program.

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 health care professionals interested in health care delivery research.

b. Program Requirements: Students are required to successfully complete all of the following courses if they have not been previously completed: Special Topics in Health Technology Assessment (MED 6095), Biostatistics I (MED 6200), Basic Clinical Epidemiology (MED 6250), Clinical Research Design (MED 6255) and Applied Data Analysis for Epidemiology (MED 6260). Students are required to take the Ph.D. Seminar Series (MED 6410-6413).

4. Community Health

a. The graduate program in Community Health enables students to pursue research and academic studies in selected topics including community health, epidemiology, socio-behavioral health, biostatistics, health services utilization, health policy and health promotion.

b. Program Requirements: Students are required to take the Ph.D. Seminar Series (MED 6410-6413).

5. Human Genetics

a. The graduate program in Human Genetics will enable students to pursue academic studies and research in a number of areas including cancer genetics, 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 6410-6413).

6. Immunology and Infectious Diseases

a. The Immunology and Infectious Diseases group has an interdisciplinary character and consists of faculty from biomedical science and oncology research. 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. Program Requirements: Students are required to successfully complete three core courses if they have not been previously completed: Immunology I (MED 6127), Immunology II (MED 6128) and Advanced Immunological Methods (MED 6130). Students are required to attend, for credit, and participate in the Immunology and Infectious Diseases Seminar Program (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 but also including faculty from the Department of Psychology in the Faculty of Science. 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 and membrane physiology. The Neuroscience Program is a Chapter of the Society for Neuroscience.

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.

28.25.1.4 Courses

For a list of courses offered by the Faculty of Medicine refer to Courses offered for the Master of Science in Medicine.

28.26 Pharmacy

Associate Professor and Director

L.R. Hensman

The Degree of Doctor of Philosophy in Pharmacy is offered to qualified candidates 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 candidate in graduate studies shall comply with the General Regulations, Degree Regulations and all additional requirements of the School of Pharmacy.

28.26.1 Doctor of Philosophy

28.26.1.1 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. program if 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 an 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.
28.26.1.2 Program of Study and Research

1. As a minimum, each candidate 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. Candidates 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. Candidates 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 candidates 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 candidates 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 candidate’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.

28.26.1.3 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates 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
6100-6104 Special Topics Courses
6999 Pharmacy Research Seminar

28.27 Physics and Physical Oceanography

Professor and Head of the Department
B. de Young

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.

28.27.1 Doctor of Philosophy

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.

28.27.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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
6010-19 Special Topics in Condensed Matter Physics
6010-19 Special Topics in Condensed Matter Physics
6040 Biophysics
6050-69 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
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.

28.28 Psychology

Professor and Head of the Department
I. Neath

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.

Applications
1. All applicants are required to submit results from the General section of the Graduate Record Examinations.
2. At least one letter of reference should come from someone who is familiar with the applicant's research capability.
28.28.1 Doctor of Philosophy

1. An applicant must hold either a Master's Degree or an Honours Bachelor's Degree with first class standing to be considered for admission. 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: (1) an essay, the topic of which is different from the subject of the thesis, and (2) an oral examination which tests the candidate's ability to integrate the essay into the broad area of Psychology. The essay topic will be assigned by the Examining Committee in consultation with the student and Supervisor. The essay should not be a précis of the literature, but a critical appraisal of a subject. This should identify important unresolved issues, and where possible suggest solutions to them.

28.28.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, 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 Advanced Methods in Applied Social Psychological Research
- 6404 Project in Applied Social Psychology

NOTE: This course is open only to students in the Master of Applied Social Psychology

- 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
- 6990 Doctoral Seminar I
- 6991 Doctoral Seminar II
- 6992 Doctoral Seminar in Cognitive and Behavioural Ecology (Cross-listed as CABE 6992)

28.29 Social Work

Assistant Professor and Acting Director
E. Oliver

28.29.1 Doctor of Philosophy

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. 1 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 candidate 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, candidates 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 Director (School of Social Work). It shall consist of:
      i. the Ph.D. Program Co-ordinator who will serve as representative of the Director of the School of Social Work and who shall occupy the Chair
      ii. the candidate's Supervisor
      iii. the Dean of Graduate Studies or delegate
iv. three other members recommended by the Director of the School of Social Work. One of these normally will be on the candidate's Supervisory Committee.

Including the Supervisor, no more than two members of the Examination Committee may be nominated from the candidate'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 in Social Work will consist of a written paper which has two main parts. The first part will contextualize the student's substantive area through a comprehensive analysis and discussion of its place in and development from social work theory and the profession’s history. This part should demonstrate a comprehensive understanding of competing theoretical frameworks and orientations in social work and should demonstrate appreciation for historical developments generally as well as specifically to the student's substantive area of interest. The second part of the paper will focus specifically on the student's substantive area. In consultation with the Examination Committee, the student will identify an area of empirical research that may be undertaken and will prepare a written statement that includes: an introduction and formulation of at least two related research questions; a literature review that is consistent with these questions, which presents a critical evaluation of the literature, and that synthesizes the literature into the student's own theoretical framework; two competing research designs for answering the research question and a critical compare and contrast that leads to an argument for one design over the other. 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 Ph.D. Program Co-ordinator in the School of Social Work. The written product shall be no less than 50 pages and not more than 75 pages. It will be orally defended. The student shall have up to one semester (13 weeks) to submit the paper.

d. The Ph.D. examination procedure shall be initiated by the candidate's Supervisor who will notify, in writing, the Director (School of Social Work) of the candidate's readiness. The candidate'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 candidate 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 candidate must submit a thesis proposal to the Supervisory Committee based on her/his 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 candidate within one month of its acceptance, rejection, or acceptance with recommended changes.

c. If the proposal is not acceptable, the candidate 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 candidate's program.

d. The thesis shall give evidence of the candidate'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.

28.29.2 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

28.30 Sociology

Associate Professor and Head of the Department
A. Micucci

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.

28.30.1 Doctor of Philosophy

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. candidates must complete a minimum of 6 credit hours in graduate courses in sociology, including Sociology 6150 Social Theory and Sociology 6040 Methods of Sociological Research, 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 candidates undertake appropriate course work in their area of research.

4. Proficiency in a second language will be required when the candidate'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, which may be followed by a supplementary oral examination, shall be completed by full-time students no later than the end of the second year 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, candidates must demonstrate knowledge of their special areas of research within the context of the discipline of Sociology. The examination shall consist of three parts: social theory, research methods, and a special area.

6. No more than two years after having been admitted to the program the candidate must submit a thesis proposal that is considered satisfactory by the Supervisory Committee.

28.30.2 Courses

A selection of the following graduate courses will be offered to meet the requirements of candidates, as far as the resources of the Department will allow:

- 6040 Methods of Sociological Research
- 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 (cross-listed as Women's Studies 6380)
- 6390 Sociology of Culture
- 6610 Socialization
- 6620 Current Topics in Social Behaviour
- 6880 Sociology Graduate Seminar

28.31 Theoretical Physics

Board of Studies

Dr. I. Booth, Department of Mathematics and Statistics - Chair
Dr. C. Radford, Department of Mathematics and Statistics
Dr. J. Whitehead, Department of Physics and Physical Oceanography
Dr. I. Afanassiev, Department of Physics and Physical Oceanography

28.31.1 Program

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.

28.31.2 Regulations

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.
29 Regulations Governing the Degree of Doctor of Psychology

Administrative Committee
Dr. C. Arlett, Department of Psychology - Director
Ms. B. Cater, Eastern Health
Ms. S. Chaulk, Graduate Student Representative
Dr. K. Hadden, Department of Psychology
Dr. O. Heath, University Counselling Centre
Dr. G. Hurley, University Counselling Centre
Dr. J. Spiegel, Association of Newfoundland Psychologists

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 prepare clinical psychologists to provide a variety of psychological services to individuals, families and communities.

29.1 Administration
1. The Director is appointed by the Head of the Psychology Department 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, representatives from academic units involved in the program, and a representative from the Association of Newfoundland Psychologists. The Psychology Department Head, on the recommendation of the Director, appoints Committee members.
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.

29.2 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 senior courses in each of the following areas: biological bases of behaviour, cognitive-affective bases of behaviour, social bases of behaviour, individual behaviour, and historical foundations of psychology, as well as an Honour's thesis. Students will only be admitted on a full-time basis and must start their program in the Fall semester.
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.

29.3 Program of Study

29.3.1 Comprehensive Examination
The Psy.D. comprehensive exam, consisting of a written and an oral component, shall be taken during the third 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.

29.3.2 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 concerning evaluation of Ph.D. theses will be followed.

29.3.3 Predoctoral Internship
All students will be required to complete a twelve-month, 1750 clock-hour predoctoral internship.
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<tr>
<th>Year 1</th>
<th>Psychology 6000 Advanced Statistics</th>
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<td>Psychology 7031 Practicum in Assessment and Intervention II</td>
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<td>Psychology 7032 Practicum in Community Intervention and Interprofessional Practice</td>
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<td>Year 3 Fall Semester</td>
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<td>Psychology 7050 Practicum in Supervision I</td>
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<td>Psychology 7051 Practicum in Supervision II</td>
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<td>Year 3 Spring Semester</td>
<td>Psychology 7035 Practicum in Rural Intervention and Interprofessional Practice</td>
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<td>Year 4</td>
<td>Predoctoral Internship</td>
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### 29.4 Courses

- 6000 Advanced Statistics
- 6001 Research Design
- 6602 Research Design in Clinical Psychology
- 6610 Principles of Effective Relationships
- 6611 Ethics of Professional Practice
- 6612 Adult Psychopathology
- 6613 Child 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
- 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
- 7010 Practicum in Ethics and Relationship Skills
- 7020 Practicum in Assessment and Diagnosis
- 7021 Practicum in Clinical Assessment and Diagnosis
- 7030 Practicum in Assessment and Intervention I
- 7031 Practicum in Assessment and Intervention II
- 7032 Practicum in Community Intervention and Interprofessional Practice
- 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