

MEMORIAL UNIVERSITY OF NEWFOUNDLAND  
SENATE

The regular meeting of Senate was held on February 12, 2019, at 4:00 p.m. in the Lecture Theatre in the Physical Education Building, Room 2001.

48. PRESENT

Dr. N. Golfman (Chair), Dr. N. Bose, Mr. G. Blackwood, Dr. D. Hardy Cox, Dr. M. Abrahams, Dr. E. Furey (for Dr. K. Anderson), Dr. S. Bugden, Dr. I. Dostaler, Ms. C. Ennis-Williams, Dr. A. Gaudine, Dr. G. Naterer, Mr. T. Nault, Dr. M. Piercey-Normore (via videoconferencing), Dr. L. Robinson (via videoconferencing), Dr. L. Rohr, Dr. A. Craig (for Dr. J. Simpson), Dr. M. Steele, Dr. A. Surprenant, Dr. I. Sutherland, Dr. G. Watson, Dr. T. Adey, Ms. A. Ambi, Dr. E. Bezzina (via videoconferencing), Dr. J. Blundell, Dr. J. Connor, Professor A. Fisher, Dr. I. Fleming, Dr. G. George, Dr. M. Haghiri (via videoconferencing), Dr. E. Haven, Dr. J. Hawboldt, Dr. R. Haynes, Mr. D. Howse, Dr. S. Matthews, Dr. S. McConnell, Dr. J. Munroe, Dr. K. Parsons, Dr. D. Peters, Ms. H. Pretty, Dr. A. Sarkar, Dr. K. Simonsen, Ms. H. Skanes, Dr. K. Snelgrove, Mr. A. Alkasasbeh, Mr. P. Isesele, J. Godfrey, Ms. B. Howard.

Dr. Golfman noted that she is chairing today's meeting as the President is away.

**Secretary of the Senate Committee on Undergraduate Studies  
(Standing Invitation)**

Dr. Shannon Sullivan

Dr. Golfman welcomed all Senators to this meeting of Senate.

**Land acknowledgement:**

We respectfully acknowledge the territory in which we gather as the ancestral homelands of the Beothuk, and the island of Newfoundland as the ancestral homelands of the Mi'kmaq and Beothuk. We would also like to recognize the Inuit of Nunatsiavut and NunatuKavut and the Innu of Nitassinan, and their ancestors, as the original people of Labrador. We strive for respectful partnerships with all the peoples of this province as we search for collective healing and true reconciliation and honour this beautiful land together.

**Welcome:**

**New Associate Vice-President (Academic), Students**

Dr. Donna Hardy Cox (effective January 1, 2019)

### **New Interim Dean of Social Work**

Dr. Ross Klein (effective January 1, 2019 until a permanent Dean is appointed)

Dr. Golfman noted that it would be appreciated if when you speak you use the microphone and introduce yourself and your constituency as Grenfell Campus Senators are joining by videoconferencing and otherwise will not be able to hear.

49. **APOLOGIES FOR ABSENCE**

Apologies were received from The President, Dr. B. LeFrancois, Dr. S. MacDonald, Dr. M. Woods.

50. **MINUTES**

It was moved by Mr. Alkasasbeh, seconded by Dr. George and carried that the Minutes of the regular meeting held on December 11, 2018, be taken as read and confirmed.

### **CONSENT AGENDA**

It was moved by Dr. George, seconded by Dr. Surprenant and carried that the consent agenda, comprising the items listed in 51-53 below, be approved as follows.

51. **Report of the Senate Committee on Undergraduate Studies**

51.1 **School of Arts and Science**

Page 209, 2018-2019 Calendar, under the heading 13.10.3 Canadian Literature, add the following new course:

**“2145 Pride Literature in Canada** considers literature that has been shaped by alternative sexualities, gender identities, and trans experiences (LGBTQI voices).

**PR: English 1000 and one of English 1001, 1110**

**Abbreviated Course Title: Pride Literature in Canada”**

Page 171, 2018-2019 Calendar, under the heading 7.2.1 Bachelor of Arts with Major in English Language and Literature, amend Table 1 as follows:

School of Arts and Science (cont'd)

**Table 1 Bachelor of Arts with Major in English Language and Literature**

Required Courses	Elective Courses
<ul style="list-style-type: none"> <li>• Courses as outlined under <a href="#">Grenfell Campus Core Program Requirements</a>, <b>Breadth of Knowledge Requirement</b>, <b>Literacy Requirement</b>, and <a href="#">Quantitative Reasoning and Analysis Requirement</a></li> <li>• English 1000 and 1001 or equivalent</li> <li>• English 2005, 2006, 2007, 3205 or 3206, 3395, 4105</li> </ul>	<ul style="list-style-type: none"> <li>• A minor comprised of 8 courses, 24 credit hours chosen from <b>Table 19 Minor Programs Offered by the School of Arts and Social Science</b>, or from <a href="#">Table 5 Minor Program Offered by the School of Fine Arts</a>, or from <b>Table 12 Minor Programs Offered by the School of Science and the Environment</b>. As an alternative to a Minor, a second Major may be completed.</li> </ul>
<p>18 credit hours in one of the following concentrations. Within each concentration, there must be a minimum of 6 credit hours at the 3000 level and 6 credit hours at the 4000 level.</p> <ul style="list-style-type: none"> <li>• <b>Canadian Literature Concentration</b></li> <li>• English 2146, 4950 and 12 credit hours in Canadian Literature from the following selection: English <a href="#">2145</a>, 2155, 2156, 2905, 3145, 3147, 3148, 3149, 4307, 4825-35.</li> <li>• <b>Dramatic Literature Concentration</b></li> <li>• English 2350, 2351, 4950 and 9 credit hours in Dramatic Literature from the following selection: English 3021, 3171, 3181, 3205 or 3206 (whichever course has not been used to fulfil the requirements of the English Core), 3275, 4302, 4305, 4307, 4308, 4316, 4317, 4836-44.</li> <li>• <b>Modern Literature Concentration</b></li> <li>• English 3215, 3216, 4950 and 9 credit hours in Modern Literature from the following selection: English 2215, 2242, 2243, 2244, 2705, 2805, 2870, 2905, 3275, 3810, 3905, 4245, 4246, 4302, 4305, 4308, 4861-4870, 4905.</li> <li>• <b>Combined Concentration</b></li> <li>• A total of 18 credit hours from English Concentration Courses which must include:</li> <li>• At least 6 credit hours from one of three concentrations (Canadian, Dramatic, Modern) as specified below and an English 4950 project within</li> </ul>	<p>Elective courses to make up the total of 120 credit hours, other than those required for the <a href="#">Grenfell Campus Core Program Requirement</a> and Major/Minor requirements, may be chosen according to the following guidelines:</p> <ul style="list-style-type: none"> <li>• Any courses in arts, social science, science and fine arts and</li> <li>• Up to 15 credit hours in other subject areas.</li> </ul>

<p>the area chosen:</p> <ul style="list-style-type: none"> <li>• Canadian Literature: 2146 and at least 3 additional credit hours in this concentration or</li> <li>• Dramatic Literature: 2350 or 2351 and at least 3 additional credit hours in this concentration or</li> <li>• Modern Literature: 3215 or 3216 and at least 3 additional credit hours in this concentration.</li> <li>• At least 3 credit hours from each of the other two concentrations.</li> </ul>	
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## 51.2 School of Social Work

Page 531, 2018-2019 Calendar, under the heading 4.5 Complementary Studies, amend Table 1 as follows:

**Table 1 Complementary Studies**

<b>The Six Learning Objectives for Complementary Studies Courses</b>	<b>Approved Disciplines and Course Numbers</b>
1. Students will develop university knowledge and skills in critical reading, writing, and analysis.	Critical Reading and Writing Courses (CRW) <del>or Designated Writing courses—(W)—Grenfell Campus,</del> chosen from the following disciplines: Archaeology, English, Folklore, Gender Studies, History, <del>Humanities</del> , Philosophy, Political Science, Religious Studies
2. Students will develop foundational knowledge and appreciation for the various expressions and experiences of human and cultural diversity.	Anthropology 1031, 2413, <u>3058</u> , 3060, 3061, 3063, 3100, 3210, <u>3305</u> English 2122, 2705, 3810 Gender Studies 1000, 2000, 2006, <u>2007</u> , <u>2010</u> , 3005, <u>3008</u> , <u>3015</u> , 3025, <u>3026</u> , 3100, 3500 Humanities 2002, 3001 <u>Linguistics 1100, 1155, 2025, 2026, 2060, 2210, 2212, 3210</u> Psychology 1000, 1001, 2020, 2025, 2030, 2125, 2540, <u>3640</u> <u>Religious Studies 1000, 2610</u> Sociology 2100, 2200, 2220, 2230, <u>3311</u> , 3314, 3731, 4071, 4072, 4092, 4201, 4213, 4230
3. Students will develop foundational knowledge and understanding of historical and contemporary experiences of Indigenous peoples of Canada.	Anthropology 2414 Archaeology 1005 or History 1005, 2482 English 2160 Gender Studies 3015 History 2800, 3520, 3525 Humanities 3100 <u>Linguistics 2022, 2060</u> Political Science 3830 Law and Society 3012, 3014 Religious Studies 3880 <u>Sociology 4205</u>
4. Students will develop foundational knowledge and awareness of the historical and contemporary realities of social inequities, imperialism, and racism.	Anthropology 3061, <u>3058</u> , 3063, 3100, <u>3305</u> Archaeology 1005 or History 1005 Gender Studies 1000, 2000, 2006, <u>2007</u> , <u>2010</u> , 3005, <u>3008</u> , 3025, <u>3026</u> , 3100, 3500 Geography 1050, 2001 History 2140, 2800, 3520, 3525, 3760, 3770, 3813, 3821, 4253, 4421 Sociology 2100, 3180, <u>3311</u> , 3314, 3420, 4092, 4099, <u>4208</u> , 4210, 4230

5. Students will develop foundational knowledge in governance, <del>and</del> policy-making, <u>and the justice system.</u>	<u>Gender Studies 3500</u> Humanities 1002, <del>2000</del> , 2002 <u>Law and Society 1000, 2000, 3012, 3014, 3015, 3016, 3300</u> <u>Police Studies 1000, 2200, 2300, 3000, 3100, 3306, 3395</u> Political Science 1000, 1010, <u>1020</u> , 2600, 2800, <u>3140, 3351 or the former 3550</u> , 3610, 3620, 3650, <del>3631 or the former 3731</del> , 3800, <u>3820, 3830, 3870</u> , 3880, 3890 <del>Police Studies 1000, 3000, 3100</del> Sociology <u>3306, 3395</u> , 4208
6. Students will develop a critically reflective understanding of contemporary society (locally, nationally, and globally) and their place in it.	Anthropology 1031, 2413, <u>3058, 3318</u> English 3810 <del>Humanities 4001</del> History 2665, 3120, 3760, 3770, 3813, 3821, 4253 <u>Humanities 1002, 2002, 4001</u> Philosophy 1005 or the former 1600, 2020 or the former 2220, 2100 or the former 2551, 2110 or the former 2553, 2120 or the former 2552, 2320 or the former 2541, 2370 or the former 2400 <del>Law and Society 1000, 2000, 3012, 3014, 3300</del> <u>Religious Studies 1000, 2610</u> Social/Cultural Studies 2000 Sociology 1000, 2100, 2110, 2120, 2200, 2210, 2220, 2230, 2240, 2250, 2270, <u>3130</u> , 3140, 3210, 3290, <u>3307, 3311</u> , 3318, 3400, 3420
Courses may be offered at St. John's and/or Grenfell Campuses. For further information refer to the appropriate <b>Course Descriptions</b> sections for the <b>Faculty of Humanities and Social Sciences</b> and the <b>Faculty of Science</b> for the St. John's Campus and the <b>Course Descriptions</b> section for the <b>Grenfell Campus</b> .	

Page 532, 2018-2019 Calendar, under the heading 5.1 General Information, amend the section as follows:

### **“5.1 General Information**

...

3. Selection of candidates for admission to the Bachelor of Social Work is based on academic standing, relevant work experience/volunteer experience and/or community involvement in human services related to social work, and personal suitability for a career in social work.

...

5. The School of Social Work strives to enrich its teaching, research and scholarship through the contributions of individuals from diverse backgrounds with different attributes. However, for many applicants, institutional processes and cultural and racial differences exist which have presented barriers to learning. In keeping with the Canadian Association of Social Work Education (CASWE) Standards for Accreditation, the mission of Memorial University, and the mission, vision, and values of the School of Social Work, we have developed our Educational Equity Initiative. The intent of this initiative is to encourage applicants with diverse identities, experiences, and backgrounds to apply. Further, the Educational Equity Initiative aims to correct conditions of disadvantage in professional education. Therefore, the School offers a minimum of 10% of the seats in the BSW program to eligible applicants who have met the minimum requirements for admission and who identify as First Nations, Inuit, or Métis (minimum of 5% of seats) and/or as

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members of another equity group (minimum of 5% of seats). All applicants applying under the Educational Equity Initiative must complete the appropriate section on the School of Social Work First Degree or Second Degree Application form.

~~In order to correct conditions of disadvantage in professional education, the School offers a minimum of 10% of seats in the First Degree program and the Second Degree program through our Educational Equity Initiative. Eligible applicants are persons who have met the minimum requirements for admission to the program and who self identify as persons of First Nations, Inuit, Métis, or blended ancestry (minimum of 5% of seats) and/or as members of an equity group (minimum of 5% of seats). All applicants applying under the Educational Equity Initiative must complete the appropriate section on the School of Social Work First Degree or Second Degree Application form.”~~

Page 532, 2018-2019 Calendar, under the heading 5.3.1 First Degree Program, amend the section as follows:

**“5.3.1 First Degree Program**

1. To be considered for admission to the First Degree Bachelor of Social Work program, applicants must have:

...

c. completed a minimum of 60 hours of verified work experience/volunteer experience and/or community involvement in human services related to social work.

...”

Page 533, 2018-2019 Calendar, under the heading 5.3.2 Second Degree Program, amend the section as follows:

**“5.3.2 Second Degree Program**

The Bachelor of Social Work as a Second Degree is a 60 credit hour program intended for candidates who have completed a university degree, the required prerequisite courses, meet the academic performance requirements, and have verified work experience/volunteer experience and/or community involvement in human services related to social work.

1. To be considered for admission to the Bachelor of Social Work as a Second Degree, applicants must have:

...

d. completed a minimum of 300 hours of verified work experience/volunteer experience and/or community involvement in human services related to social work.

...”

Page 535, 2018-2019 Calendar, under the heading 7.2.2 Probationary Promotion, amend the section as follows:

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**“7.2.2 Probationary Promotion**

Probationary Promotion means that a student has not received a **Clear Promotion** and must meet certain conditions to obtain Clear Promotion. A student can only receive Probationary Promotion once in the Bachelor of Social Work program. The length of Probationary Promotion can be up to three terms. Each of the following violations is sufficient for a student to receive Probationary Promotion. Probationary Promotion will be given to a student

- who has completed the term with a numeric grade of less than 65% in one required course listed in Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree). In order to regain Clear Promotion and meet the course prerequisites needed to proceed to the next semester, the student must do the following:

- ⊖ If the required course is one of the Professional Education Courses listed in Table 2 or Table 3, the student must repeat the course and obtain a numeric grade of at least 65%.

- ⊖ If the required course is one of the General Education Courses from Table 1 Complementary Studies the student must complete the same course or another course listed for the corresponding Learning Objective and obtain a numeric grade of at least 65%.

- ~~• who has completed the term with a numeric grade of less than 65% in one required course in the Bachelor of Social Work degree program from Table 2 Bachelor of Social Work (as a First Degree) or Table 3 Bachelor of Social Work (as a Second Degree) from Table 3 Bachelor of Social Work (as a Second Degree). The student must repeat the course within three academic terms from the unsuccessful completion and obtain a numeric grade of at least 65%. The student will not be permitted to repeat more than one course in the program.~~

who has behaved in a manner that breaches the Memorial University **Student Code of Conduct**, the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy & Procedures, and/or the School of Social Work Social Media Policy and Guidelines for Social Work Students but for which the School considers that withdrawal from the program is not warranted. The length of Probationary Promotion is up to three academic terms during which time the student is expected to comply with the penalties and/or conditions determined by the School or the University.”

Page 536, 2018-2019 Calendar, under the heading 7.2.3 Promotion Denied, amend the section as follows:

**7.2.3 Promotion Denied**

Any one of the following violations is sufficient for a student to receive Promotion Denied. Promotion Denied will be given to a student:

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...

- who has behaved in a manner that breaches the Memorial University **Student Code of Conduct**, the current Canadian Association of Social Workers Code of Ethics and the Guidelines for Ethical Practice, the Bachelor of Social Work Programs Suitability for the Profession Policy & Procedures, and/or the School of Social Work Social Media Policy and Guidelines for Social Work Students and for which the School or the University considers that withdrawal from the program is warranted, but for which the School considers that withdrawal from the program is not warranted.

51.3 School of Pharmacy

Page 440, 2018-2019 Calendar, under the heading 12 Course Descriptions, amend the section as follows:

~~“**3003 Pathophysiology**~~

~~examines the nature of disease, causes and effects, and alteration in structure and function of cells, inflammation, neoplasia, genetic and chromosomal diseases, healing and repair, stress and disease.~~

~~PR: PHAR 2003 or equivalent~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

**3006 Immunology** (same as Biochemistry 4105 and Biology 4200) is an introduction to the cells and organs of the innate and adaptive immune systems. The molecular and cellular basis of allergy, autoimmunity, vaccination and cancer immunology will also be discussed.

CR: Biochemistry 4105, Biology 4200, and the former PHAR 4105

PR: PHAR 2004

~~**3009 Pharmacology** explores topics in general pharmacology including drugs used in the treatment of inflammatory diseases, renal pharmacology, anticoagulant and antithrombotic drugs, antihyperlipidemics, drugs used in the treatment of anemia, and endocrine pharmacology.~~

~~PR: Medicine 4300 or equivalent~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

**302W Structured Practice Experience II** is a structured practice experience in hospital pharmacy after completion of the second year which will provide an opportunity for students to apply their technical skills and introduce them to patient care activities. The practical experience is normally comprised of four weeks during May/June.

AR: attendance is required

CH: 0

LC: 0



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PR: successful completion of all courses in Academic Terms 3 & 4 of the program

UL: applicable only to the Bachelor of Science (Pharmacy) program

**305P Pharmacy Practice Experience I** provides six weeks (240 hours) of practice experience in a community pharmacy. The focus will be on the legal and regulatory framework governing pharmacy practice, prescription processing, gathering and assessing patient information, patient education, drug information, health promotion, and quality assurance. Students will apply their knowledge and skills in the provision of patient care. Effective communication skills, professionalism, and teamwork are expected.

AR: attendance is required

PR: all Academic Term 4 & 5 courses

~~**3103 Microbiology of Infectious Diseases** examines the various types of micro-organisms (bacterial, viral, parasitic and fungal), the environment in which they are able to multiply and their relationship to human diseases. The classifications of their morphology, mode of reproduction and the metabolic process, the physiological and epidemiological principles of infectious diseases and their manifestations are discussed including the principles of immunization.~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

**3111 General Biochemistry** covers the catabolism of carbohydrates, lipids and amino acids. Mitochondria, chloroplasts and ATP synthesis. Biosynthesis of carbohydrates and lipids. Metabolic specialization of differentiated cells and tissues. Integration of metabolism.

CR: Biochemistry 3106, 3206

PR: one of PHAR 2004, Biochemistry 2201 or the former 2101

~~**3203 Medicinal Chemistry I** presents topics covering the molecular basis of action, metabolism, and toxicity of drugs. It provides an orientation to medicinally important nuclei and their nomenclature, followed by principles of drug discovery and development. The relationship between molecular structure and biological action of drugs together with elementary molecular modelling, and theories related to receptors and drug action will be presented. Concepts of drug metabolism and the relevant metabolic pathways in relationship to drug inactivation and toxicity, along with the principles of drug latention and prodrugs is covered. The structures, selected physicochemical properties, mechanism of action, structure-activity relationships, toxic effects at molecular level, and metabolism of drugs including central nervous system.~~

~~CO: Medicine 4300 and PHAR 3003~~

~~OR: tutorials 1 hour per week; attendance is required~~

~~PR: Chemistry 2440 or Chemistry 2400 and 2401~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

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**3204 Medicinal Chemistry II** is a continuation of Pharmacy 3203 and focuses on the structures, selected physicochemical properties, mechanism of action, structure-activity relationships, toxic effects at molecular level, and metabolism of different pharmacological classes of drugs including cholinergic agents, analgetic and anti-inflammatory agents, insulin and oral antidiabetic drugs, steroids and related compounds, antihyperlipidemic agents, histamine and antihistaminic agents, diuretic agents, angiotensin converting enzyme inhibitors and antagonists, and calcium channel blockers.

CO: PHAR 3009

OR: tutorials 1 hour per week; attendance is required

PR: PHAR 3203

UL: applicable only to the Bachelor of Science (Pharmacy) program

**3205 Pharmaceutics III** consists of several units. The standards of good manufacturing practice will be introduced. Characteristics, preparation, quality assurance and delivery systems for sterile products will be covered. The basic principles governing the application of radiation and radioactive compounds in medical diagnosis and therapy will be discussed. The status of current biotechnology based pharmaceuticals and biotechnology related matters will be addressed.

PR: PHAR 2202

UL: applicable only to the Bachelor of Science (Pharmacy) program

**3250 Pharmacy Practice III** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for the practice of pharmacy. The focus will include patient assessment, care plan development, counselling, follow-up, interprofessional collaboration, and communication with special patient populations. Emphasis will be on the development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork. Application of knowledge and skills will occur in real and simulated pharmacy practice situations.

AR: attendance is required

CH: 5

CO: all Academic Term 4 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 2251

**3251 Pharmacy Practice IV** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for the practice of pharmacy. This course will build on pharmacy practice concepts and will emphasize patient safety. Development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will occur. Application

School of Pharmacy (cont'd)

of knowledge and skills will take place in simulated pharmacy practice situations.

AR: attendance is required

CH: 5

CO: all Academic Term 5 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 3250

**3270 Pharmacotherapy I** introduces pharmacotherapeutic management of common diseases and effective management of patients' drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include drug interactions, gastroenterological conditions, musculoskeletal conditions, nutrition, and special populations.

CH: 5

CO: PHAR 3250, 3801, and 3805

LC: 5

**3271 Pharmacotherapy II** continues the discussion of pharmacotherapeutic management of common diseases and effective management of patients' drug therapy. Emphasis will be placed on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Topics may include cardiovascular, dermatological, respiratory, and infectious diseases.

CH: 4

CO: PHAR 3251

LC: 4

PR: PHAR 3270, 3801, and 3805

~~**3301 Patient Care I** is an introductory course in patient care, especially in the areas of self-care and self-treatment and the role of the pharmacist. The regulatory environment of non-prescription products and the prevention and treatment of health conditions amenable to self-management will be discussed.~~

~~CO: PHAR 3009~~

~~PR: Medicine 4300~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

**3410 Leadership and Health Promotion** focuses on the roles of leadership, advocacy, and health promotion in pharmacy to improve

School of Pharmacy (cont'd)

patient care. Insight into leadership skills and the roles of educating, advocating, and promoting health to patients, families, communities, and society will be discussed. The change process and the leader's role in change will be introduced.

~~**3650 Pharmacy Skills** continues the development of the skills necessary for pharmacy practice in order to meet the educational outcomes for the second year of the pharmacy program. Students will continue to develop abilities in communication, professionalism, critical thinking, problem-solving, teamwork and self directed learning. Pharmacy practice in the hospital setting will be a focus. Students will participate in sterile product preparation and practice drug information and pharmaceutical calculation skills relevant to hospital practice. Students will develop pharmacist care plans and will further develop their patient education skills. Scenarios will relate to the courses of study in the second year and draw on material studied in earlier years of the program. Students will participate in interprofessional education (IPE) modules with students from other health related programs when such modules are available.~~

~~CO: all Academic Term 3 Pharmacy courses~~

~~CR: the former PHAR 3150~~

~~LC: 0~~

~~OR: practical sessions 3 hours per week; tutorials 1 hour per week; attendance is required~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

~~**3651 Pharmacy Skills** continues the development of the skills necessary for pharmacy practice in order to meet the educational outcomes for the second year of the pharmacy program. Students will continue to develop abilities in communication, professionalism, critical thinking, problem-solving, teamwork and self directed learning. Students will participate in practice sessions necessary to develop an understanding of and skills required in patient assessment and patient education related to patient self care. Students will build on their pharmacist care skills to meet patients' drug related needs in uncomplicated patient scenarios and drug information skills to assess information needs. Scenarios will relate to the courses of study in the second year and draw on material studies in earlier years of the program. Students will participate in interprofessional education (IPE) modules with students from other health related programs when such modules are available.~~

~~CO: all Academic Term 4 Pharmacy courses~~

~~CR: the former PHAR 3151~~

~~LC: 0~~

~~OR: practical sessions 3 hours per week; tutorials 1 hour per week; attendance is required~~

~~PR: PHAR 3650~~

~~UL: applicable only to the Bachelor of Science (Pharmacy) program~~

School of Pharmacy (cont'd)

**3801 Pathophysiology I** examines the nature of disease, causes and effects, and alterations in structure and function of cells. Topics may include cardiovascular, dermatological, gastrointestinal, and respiratory diseases.

CH: 2

CO: PHAR 3270 and 3805

LC: 2

PR: PHAR 2003

**3805 Pharmacology I** provides an introduction to the general principles of pharmacology including dose-response relationships, drug-receptor interactions, absorption, distribution, metabolism, and elimination of drugs. The focus will be on the pharmacological basis of the action of drugs leading to therapeutic effects, as well as adverse effects. Topics may include drugs used in the management of cardiovascular, gastrointestinal, respiratory diseases, and anti-inflammatory drugs.

CO: PHAR 3270 and 3801

PR: PHAR 2003

**3810 Microbiology of Infectious Diseases** examines the various types of micro-organisms (bacterial, viral, parasitic, and fungal), microbial growth, and their relationship to human diseases. The classifications of their morphology, mode of reproduction, and the metabolic process will be discussed.

CH: 2

LC: 2

**3825 Medicinal Chemistry** examines the functional group recognition and properties of drugs, drug-receptor interactions, structure activity relationships, and rational drug design. The relationship between the chemical structure of a drug and its binding affinity toward intended target enzymes or receptors, and its pharmacological activity, will be discussed.

CR: the former PHAR 3203 and 3204

PR: Chemistry 2401 and PHAR 3111”

Page 439, 2018-2019 Calendar, under the heading 12 Course Descriptions, amend the section as follows:

**“4900 Clinical Skills I** is an on-campus, three-day (21 hours) orientation to the fundamental knowledge and skills for advanced practice. ~~Topics may include the principles of prescribing, point-of-care testing, drug information skills, physical assessment, and advanced communication skills.~~ Topics such as informatics, communication, and patient assessment may be explored. This course may commence ~~beyond~~ outside the semester start and end dates.

AR: attendance is required

CH: 2

School of Pharmacy (cont'd)

CO: PHAR 4901 and 4902

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**4901 Essentials of Pharmacy Practice** provides the foundational principles and skills of pharmacy practice such as the provision of patient-centred care, pharmacokinetics, and social justice. documentation, special populations, and pharmacokinetics may also be explored. The pass grade is 60%.

CH: 4

CO: PHAR 4900 and 4902

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**4902 Pharmacy Management and Leadership** explores the principles of change management and leadership as they relate to pharmacy practice. Topics may include the business environment, financial management, continuous quality improvement, business marketing and promotion, human resources management, pharmacy services implementation, effective pharmacy operations, and technology in pharmacy practice. The pass grade is 60%.

CH: 2

CO: PHAR 4900 and 4901

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**4903 Evidence-Based Practice** integrates advanced drug information and critical evaluation of the medical literature. Students will apply their knowledge of pharmacy practice research and evidence-based practice to inform therapeutic decision-making. critical evaluation of medical literature, and synthesis of information to form reliable therapeutic recommendations using the principles of evidence-based practice. Topics may include critical appraisal of drug therapy and pharmacy practice research. The pass grade is 60%.

PR: PHAR 4900, 4901, and 4902

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**4910 Applied Learning I: Leadership and Education** focuses on the ~~development~~ application of leadership skills to implement change in practice through education and advocacy. ~~Topics may include: learning styles, facilitation skills, instructional design, and teaching methods. Principles of health promotion and the importance of advocating change will also be explored.~~ Students will demonstrate their learning through the completion of applied learning activities at their practice sites.

PR: PHAR 4902

UL: applicable only to the Doctor of Pharmacy for Working Professionals

School of Pharmacy (cont'd)

**5901 Pharmaceutical Care I** integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for diseases of the cardiovascular system. ~~discusses the pharmacotherapeutic management of common diseases and effective management of patient's drug therapy. The focus will be on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Emphasis will be placed on diseases of the cardiovascular system. The pass grade is 60%.~~

PR: PHAR 4910-4903

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**5902 Pharmaceutical Care II** integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for renal, digestive, and oncological diseases. The pass grade is 60%. ~~discusses the pharmacotherapeutic management of common diseases and effective management of patient's drug therapy. The focus will be on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Emphasis will be placed on diseases of the renal and digestive systems.~~

PR: PHAR 4910 4903

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**5903 Pharmaceutical Care III** integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for diseases of the protective, structural, and endocrine systems. The pass grade is 60%. ~~discusses the pharmacotherapeutic management of common diseases and effective management of patient's drug therapy. The focus will be on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Emphasis will be placed on disorders of the protective, structural, and endocrine systems.~~

School of Pharmacy (cont'd)

PR: PHAR 4910 4903

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**5904 Pharmaceutical Care IV** integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for respiratory and infectious diseases. The pass grade is 60%. ~~discusses the pharmacotherapeutic management of common diseases and effective management of patient's drug therapy. The focus will be on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy and safety. Emphasis will be placed on respiratory disorders and infectious diseases.~~

PR: PHAR 4910 4903

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**5905 Pharmaceutical Care V** integrates the knowledge and skills necessary for the effective management of medication therapy in the provision of patient-centred care. Students will apply their knowledge of patient assessment, pharmacotherapy, and evidence-based practice to evaluate therapeutic options primarily for neurological disorders and mental health conditions. The pass grade is 60%. ~~discusses the pharmacotherapeutic management of common diseases and effective management of patient's drug therapy. The focus will be on identifying drug therapy problems, establishing therapeutic outcomes, recommending pharmacological and non-pharmacological therapeutic alternatives, developing individualized therapeutic regimens, and developing a monitoring plan to evaluate adherence, efficacy, and safety. Emphasis will be placed on neurological disorders and mental health conditions.~~

PR: PHAR 4910 4903

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**5920 Applied Learning II: Medication Safety and Evaluation** focuses on the principles of medication safety, medication use evaluation, adverse drug events, and medication errors and incident reporting. Students will demonstrate their learning through the completion of applied learning activities at their practice sites.

PR: PHAR 4910 and at least one of PHAR 5901, 5902, 5903, 5904, 5905

UL: applicable only to the Doctor of Pharmacy for Working Professionals



School of Pharmacy (cont'd)

**610P Advanced Pharmacy Practice Experience: Ambulatory Care** is a six week (240 hours) practice experience completed during the final year of the program. Students will develop their medication therapy management skills and pharmaceutical care in an ambulatory care setting. Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.

AR: attendance is required

CH: 9

PR: PHAR 6900, 6930 and at least four of PHAR 5901, 5902, 5903, 5904, 5905

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**611P Advanced Pharmacy Practice Experience: Inpatient Care** is a six week (240 hours) practice experience completed during the final year of the program. Students will develop the essential skills necessary to provide direct patient care in an inpatient setting. Students will be expected to demonstrate leadership in the responsible provision of patient care by becoming an integral member of the healthcare team while confidently using clinical reasoning and critical thinking skills. Mentorship of junior students may be a component of this experience.

AR: attendance is required

CH: 9

PR: PHAR 6900, 6930 and at least four of PHAR 5901, 5902, 5903, 5904, 5905

UL: applicable only to the Doctor of Pharmacy for Working Professionals

**6900 Clinical Skills II** is an on-campus, three-day (21 hours) introduction to the Advanced Pharmacy Practice Experience component of the program. The focus will be on topics that enable students to practice to their full scope. Topics may include motivational interviewing, intraprofessional and interprofessional collaboration, documentation, and expanded scope of pharmacy practice. Students will continue to demonstrate skills in communication, patient assessment, and documentation. This course may commence ~~beyond~~ outside the semester start and end dates.

AR: attendance is required

CH: 9

CO: PHAR 6930

PR: PHAR 4900

UL: applicable only to the Doctor of Pharmacy for Working Professionals

School of Pharmacy (cont'd)

**6930 Applied Learning III: ~~Pharmaceutical Care and Interprofessional Collaboration~~** focuses on the expansion of skills in physical patient assessment, communication, documentation, teamwork, and interprofessional collaboration through the pharmaceutical care provision of patient-centred care process. Students will demonstrate their learning through the completion of applied learning activities at their practice sites.

CO: PHAR 6930

PR: PHAR 5920 and at least three of PHAR 5901, 5902, 5903, 5904, 5905

UL: applicable only to the Doctor of Pharmacy for Working Professionals”

Page 439, 2018-2019 Calendar, under the heading 12 Course Descriptions, amend the section as follows:

**“2250 Pharmacy Practice I** ~~is the first of a series of courses where students begins the~~ acquire acquisition and apply application of the knowledge, skills, and attitudes necessary for the practice of pharmacy practice. The course will include an introduction to calculations, technical skills and the legal and regulatory framework of ~~the practice of pharmacy practice~~. ~~The development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will begin.~~ Application of knowledge and skills will occur in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required in practice sessions

CH: 5

CO: all Academic Term 1 Pharmacy courses, with the exception of PHAR 2010

OR: practice sessions 2 hours per week

**2251 Pharmacy Practice II** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice~~. The legal and professional framework of ~~the practice of pharmacy practice~~, patient counselling, and technical skills will be emphasized. ~~Development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will occur.~~ Application of knowledge and skills will take place in real and simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required in practice sessions

CH: 5

School of Pharmacy (cont'd)

CO: all Academic Term 2 Pharmacy courses, with the exception of PHAR 2010

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 2250

**3250 Pharmacy Practice III** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice~~. The focus will include patient assessment, care plan development, counselling, follow-up, interprofessional collaboration, and communication with special patient populations. ~~Emphasis will be on the development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork.~~ Application of knowledge and skills will occur in real and simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study to pass the course.

AR: attendance is required

CH: 5

CO: all Academic Term 4 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 2251

**3251 Pharmacy Practice IV** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice~~. This course will build on pharmacy practice concepts and will emphasize patient safety. ~~Development of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will occur.~~ Application of knowledge and skills will take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required

CH: 5

CO: all Academic Term 5 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 3250

**4250 Pharmacy Practice V** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice~~. Critical appraisal, patient safety, and interprofessional collaboration will be emphasized. ~~Development of~~

School of Pharmacy (cont'd)

~~competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will occur.~~ Application of knowledge and skills will take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required in practice sessions

CH: 5

CO: all Academic Term 7 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 3251

**4251 Pharmacy Practice VI** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice.~~ Sterile product preparation, drug information, patient safety, and calculations relevant to hospital practice will be introduced. Critical appraisal and interprofessional collaboration will ~~also be a focus continue.~~ ~~Continued development of competence in the areas of patient care, communication, professionalism, critical thinking, and teamwork will occur.~~ Application of knowledge and skills will take place in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study to pass the course.

AR: attendance is required in practice sessions

CH: 5

CO: all Academic Term 8 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 4250

**5250 Pharmacy Practice VII** continues the acquisition, development, and application of the knowledge, skills, and attitudes necessary for ~~the practice of pharmacy practice.~~ Critical appraisal, patient safety, and interprofessional collaboration will be emphasized. ~~Continued development of competence in the areas of patient care, communication, professionalism, critical thinking, and teamwork will occur.~~ Students will be expected to demonstrate increased independence during the application of knowledge and skills in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required in practice sessions

CH: 5

CO: all Academic Term 10 Pharmacy courses

School of Pharmacy (cont'd)

LC: 2

OR: practice sessions 3 hours per week

PR: PHAR 4251

**5251 Pharmacy Practice VIII** is the final course in the series where students acquire, develop, and apply the knowledge, skills, and attitudes necessary for the practice of pharmacy practice. ~~Demonstration of competence in the areas of patient care, drug information, communication, professionalism, critical thinking, and teamwork will be expected.~~ Application of knowledge and skills will occur in simulated pharmacy practice situations. Students must demonstrate skill proficiency in patient care, drug information, communication, professionalism, critical thinking, and teamwork at a level appropriate for the year of study in order to pass the course.

AR: attendance is required in practice sessions

CH: 4

CO: all Academic Term 11 Pharmacy courses

LC: 2

OR: practice sessions 3 hours per week; course runs over 10 weeks to accommodate PHAR 508P

PR: PHAR 5250”

Page 436, 2018-2019 Calendar, under the heading 7.1.2.1 Clear Promotion, amend the section as follows:

**“7.1.2.1 Clear Promotion**

Clear Promotion means a student can proceed to the next Academic year. Clear Promotion will be granted when the following criteria are met.

1. A student ~~must have~~ has completed the Academic year with a weighted average of at least 65% and ~~at least~~ a pass (numeric grade of at least 50% or PAS) in each course. A weighted average will be based on credit hours in the program of study as outlined in **Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program.**

~~2. A student completing PHAR 2010 must obtain a grade of PAS (pass).~~

~~3. A student completing a PPE course (PHAR 305P, 406P, 407P, 508P) must obtain a grade of PAS (pass) in each course.~~

~~4.2.~~ A student ~~must~~ has maintained professional and ethical behaviour consistent with the *Student Code of Conduct* as outlined at: [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy).

**7.1.2.2 Promotion Denied**

Promotion Denied means Clear Promotion is not achieved at the end of the Academic year. A student with Promotion Denied status will normally be required to withdraw from the School.

~~Promotion Denied will be granted~~ A student will be deemed to be in Promotion Denied status when any of the following criteria are met:

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1. A student has obtained less than a 65% weighted average in the Academic year or has obtained less than 50% in any course or has received a grade of FAL (fail) in any course within the Academic year. A weighted average will be based on credit hours in the program of study as outlined in **Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program.**

~~2. A student has obtained less than 50% in any course or who has received a grade of FAL (fail) in any course within the Academic year.~~

~~3. A student completing a PPE course (PHAR 305P, 406P, 407P, or 508P) has obtained a grade of FAL (fail).~~

~~4.2. A student has failed to obtain **Clear Promotion** at the end of each Academic year. A student has not maintained the professional and ethical behaviour consistent with the **Student Code of Conduct.**~~

~~5. A student has not maintained the professional and ethical behaviour consistent with the **Student Code of Conduct.**~~

Notwithstanding the above, the School of Pharmacy may offer the student the option to repeat an Academic year on the grounds of academic difficulties. This may be offered only once during the student's program. This restriction may be waived if it has been demonstrated that the student's academic performance has been adversely affected by factors duly authenticated and acceptable to the Committee on Undergraduate Studies of the School of Pharmacy.”

Page 432, 2018-2019 Calendar, under the heading 4.1.1.2 Pharmacy Practice Experience (PPE), amend the section as follows:

**“4.1.1.2 Pharmacy Practice Experience (PPE)**

Through Pharmacy Practice Experiences, the program aims to prepare students for exemplary pharmacy practice. Students are expected to display appropriate communication, professionalism, and teamwork, and demonstrate increased independence and critical reasoning as they progress in the program. PPEs consist of early and intermediate experiences as well as advanced pharmacy practice experiences (APPE). PPEs expose students to situations which cannot be provided in the classroom.

1. The School of Pharmacy is responsible for providing overall direction for practice experiences and will oversee the placement of students at sites. Students may be assigned to any participating site within the Province of Newfoundland and Labrador; a request to complete a PPE outside the province may be considered.

2. Students are responsible for all travel and accommodation costs associated with the PPE.

3. Students are required to provide evidence of a valid Standard First Aid Level C certificate for all PPEs. Evidence of recertification must be submitted no later than one month before the expiry date of the certification.

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4. Students must have successfully completed injection training before they start an APPE.

5. Students must comply with the policies of the site to which they are assigned. Sites may have requirements for immunization, testing or documentation beyond those required by the School. Students are required to complete these requirements in a timely fashion and at their own expense. Students unable to meet these site requirements may be delayed in their program or prevented from completing their program of study.”

51.4 Faculty of Education

Page 91, 2018-2019 Calendar, under the heading 7.1 General Degree Programs, amend the section as follows:

**7.1 General Degree Programs**

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

1. The **Bachelor of Education (Intermediate/Secondary)** is a 51 credit hour second degree program designed to prepare teachers of grades 7-12. The program is offered in a three semester (12 month), full-time format, and commences in the Fall semester of each year.

2. The **Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education** is a 69 credit hour second degree program designed to prepare both Intermediate/Secondary and Technology Education teachers. The program is offered in a four semester (16 month), full-time format and commences in the Spring of each year. A student in the program will complete courses that address the development of basic skills and competencies in a variety of technological areas and how to apply them through design and problem solving processes in a school classroom/laboratory setting.

3. The **Bachelor of Education (Post-Secondary) as a First Degree** is the equivalent of a 120 credit hour degree program designed to prepare students for a variety of instructional and leadership roles in formal and informal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.

4. The **Bachelor of Education (Post-Secondary) as a Second Degree** is a 36 credit hour second degree program designed to prepare students for a variety of instructional and leadership roles in informal and formal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education. Students in this program come from diverse backgrounds including administrative,

Faculty of Education (cont'd)

academic, adult education, business, health, literacy, policy, student services, and technical and trades professions. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.

5. The **Bachelor of Education (Primary/Elementary) as a First Degree** is a full-time, 150 credit hour degree program designed to prepare teachers for kindergarten through grade six. With the appropriate academic planning, a student can commence this Education program in the Fall semester of the third year of studies.

6. The **Bachelor of Education (Primary/Elementary) as a Second Degree** is a 72 credit hour second degree program offered at the St. John's and Grenfell Campuses and is intended for students who have completed an appropriate Bachelor's degree. This program is offered in a four semester (16 month), full-time format and commences in the Spring semester of each year. A **French Immersion Option** is available at the St. John's Campus only. (This program is currently under review and the program's timeline is subject to change including a possible Fall commencement in the 2019-20 academic year. For further information contact the [Office of Undergraduate Programs](#).)

7. The **Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education** is an 85 credit hour integrated second degree program intended for students who have completed an appropriate Bachelor's degree. The program is designed for the preparation of K-6 classroom teachers with a focus on STEM education (science, technology, engineering, and mathematics). The program is offered in a two-year (September - May) full-time format, and commences in the Fall semester of each year. This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the [Office of Undergraduate Programs](#), Faculty of Education by telephone at (709) 864-3403 or by e-mail at [muneduc@mun.ca](mailto:muneduc@mun.ca).

8. The **Bachelor of Music Conjoint with Bachelor of Music Education** is a 150 credit hour, five-year conjoint degree program offered in partnership with the School of Music. This program is designed for the preparation of K-12 music teachers, and other professionals in positions related to music education.

9. The **Bachelor of Music Education as a Second Degree** is a 45 credit hour second degree program for students who have already been awarded a Bachelor of Music. This program is the same as the music education component of the conjoint program. The program is designed to prepare music teachers in all facets of school music education: foundations of music education; primary/elementary, intermediate/secondary classroom music; and choral and instrumental music education. The program consists of 30 credit hours of course work in music education and general foundational education and a 15 credit hour teaching internship.



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10. The **Bachelor of Special Education** is a 36 credit hour second degree program designed for the preparation of Special Education teachers and is available through part-time or full-time study. This program is currently under review. For more information please contact the Academic Programs Office.

Page 98, 2018-2019 Calendar, under the heading 8.10 Bachelor of Special Education, amend the section as follows:

**8.10 Bachelor of Special Education**

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

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

Page 106, 2018-2019 Calendar, under the heading 9.9 Bachelor of Special Education, amend the section as follows:

**9.9 Bachelor of Special Education**

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

Faculty of Education (cont'd)

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

Page 95, 2018-2019 Calendar, under the heading 8.4 Bachelor of Education (Post-Secondary) as a Second Degree, amend the section as follows:

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

1. For application deadlines refer to the **Application Deadline Dates** table. To be considered for admission to the Bachelor of Education (Post-Secondary) as a Second Degree program, an applicant must meet, in addition to the general admission requirements of the University, the admission requirements as outlined below. Applicants must have:

1. been awarded an undergraduate degree from Memorial University of Newfoundland or from an institution recognized by Memorial University of Newfoundland with at least second class standing or equivalent; or
2. been awarded an undergraduate degree from Memorial University of Newfoundland or an institution recognized by Memorial University of Newfoundland and have successfully completed Education 2700, 2720 and 2801 with an average of at least 65%.

2. In assessing applications to the Bachelor of Post-Secondary Education as a Second Degree, consideration will be given to the following:

1. academic performance as described in 8.4.1 above; and
2. personal statement and references as outlined on the application to the Faculty.”

Page 58, 2018-2019 Calendar, under the heading 6.13.2 Classification of General Degrees, amend the section as follows:

**“6.13.2 Classification of General Degrees**

1. General degrees are awarded as "Classified", "Unclassified" or are not classified, in compliance with such regulations as may be required by the academic unit(s) offering the program(s). Refer to the degree regulations of the academic units for further information.

Faculty of Education (cont'd)

2. General degrees are awarded in three classes based on the system for granting points set forth in **Grading - Letter Grades, Numeric Grades and Points Per Credit Hour**, and determined as follows:

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

3. When a student obtains credit for more credit hours than are required for the degree, the student's total degree points shall include only those received for the credit hours required. In eliminating from the total points those received for credit hours beyond the requirements of the degree, the credit hour(s) for which the student receives the fewest points shall be disregarded, provided that no credit hour is disregarded that is a requisite for the degree.

4. Where a student receives more than one classified bachelor's degree, the class of each degree will be determined independently by applying the scheme set forth in **Classification of General Degrees** and provided that in determining the points total for each degree only those credit hours may be counted which are applicable towards the degree concerned.

5. A student who has been granted credit for courses completed at Memorial University of Newfoundland before the introduction of the point system, and/or one who has been given credit for courses completed at another university, will have the class of the degree determined by applying the scheme set forth in **Classification of General Degrees** in proportion to the total of required credit hours completed at Memorial University of Newfoundland since the introduction of the point system.

6. An Unclassified degree will be awarded to a student who has completed at Memorial University of Newfoundland, fewer than one-half of the credit hours required for the degree, or fewer than one-half of the required credit hours since the introduction of the point system. All students shall, however, obtain an average of 2 points or better on the total number of the credit hours required for the degree taken at this University since the introduction of the point system.

7. The following degrees are not classified: Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, Bachelor of Education (Intermediate/Secondary), Bachelor of Engineering, Bachelor of Maritime Studies, Bachelor of Music Education, Bachelor of Post-Secondary Education (as a second

Faculty of Education (cont'd)

degree), Bachelor of Science (Pharmacy), Bachelor of Special Education, Bachelor of Technology, Doctor of Medicine, Doctor of Pharmacy, and all degrees offered by the School of Human Kinetics and Recreation.”

Page 97, 2018-2019 Calendar, under the heading 8.7 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, amend the section as follows:

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

This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the [Office of Undergraduate Programs](#), Faculty of Education by telephone at (709) 864-3403 or by e-mail at [muneduc@mun.ca](mailto:muneduc@mun.ca).

1. For application deadlines refer to the [Application Deadline Dates](#) table.
2. Consideration will be given to the courses for which an applicant is registered at the time of assessment of applications. An applicant who has attended institutions other than Memorial University of Newfoundland must supply transcripts indicating Fall semester grades by February 1.
3. To be considered for admission to the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, an applicant must have:
  1. been awarded a Bachelor’s Degree, or approved (prior to program startup) for the award of a Bachelor’s Degree from a university recognized by Memorial University of Newfoundland;
  2. achieved a cumulative average of at least 65% or an average of at least 65% on the last attempted 30 credit hours;
  3. completed a minimum of:
    - 6 credit hours in English - ESL courses cannot be used to satisfy this requirement;
    - 6 credit hours in Mathematics or 3 credit hours in Calculus;
    - 6 credit hours in Psychology;
    - the former Science 1150 and 1151; or 9 credit hours from 3 separate Science areas, 6 credit hours of which must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement. The science areas are: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics; or a Focus Area in Science;
    - 6 credit hours in any combination to be chosen from: Anthropology, Archaeology, Economics, Folklore, Geography, History, Linguistics, Political Science, Religious Studies, Sociology;

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- 6 credit hours in French (recommended) or 6 credit hours in a single language other than English, or demonstration of equivalent competency in a second language; and
- the equivalent of a completed focus area as per [Table 6 Focus Areas for Bachelor of Education \(Primary/Elementary\)](#) or the completion of a major or minor within the initial Bachelor's degree program in a subject area classified as a focus area. The focus area of French is typically not available in this program. For further information please contact the Academic Programs Office.

~~An applicant with French as a Focus Area must have written the [DELF](#) Tout Public (Level B2) and achieved an overall grade of at least 70%, with no less than 60% in any one skill area of the exam. An applicant must also have completed at least 4 weeks at an approved Francophone institution in a French speaking area or have acquired equivalent work experience in a Francophone environment."~~

Page 102, 2018-2019 Calendar, under the heading 9.5 Bachelor of Education (Primary/Elementary) as a First Degree, amend Table 6 as follows:

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

<ul style="list-style-type: none"> <li>• <b>English (24 credit hours)</b></li> <li>• 6 credit hours in English at the 1000 level</li> <li>• English 2390 or 3395</li> <li>• 3 credit hours chosen from English 2000, 2001, 2005-2007, 3200, 3201, 3205</li> <li>• 3 credit hours chosen from English 2002-2004, 2010 or the former 2020, 2350, 2351</li> <li>• 6 credit hours chosen from English 2146, 2150, 2151, 2155, 2156, 2160, 3145, 3147-3149, 3152, 3155-3158</li> <li>• 3 additional credit hours in English at the 2000 level or above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Folklore (24 credit hours)</b></li> <li>• Folklore 1000</li> <li>• Folklore 2100, 2300, 2401, 2500</li> <li>• 9 credit hours in Folklore at the 3000 or 4000 level</li> </ul>
<ul style="list-style-type: none"> <li>• <b>French (24 credit hours)</b></li> <li>• A maximum of 6 credit hours at the 1000 level</li> <li>• French 2100 or equivalent</li> <li>• French 2101 or equivalent</li> <li>• French 2300 or equivalent</li> <li>• 6 credit hours chosen from French 2601, 2602, 2900 or equivalent</li> <li>• French 3100 or French 3101 or equivalent</li> <li>• At least four weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Geography (18 credit hours)</b></li> <li>• Geography 1050, 2001, 2102, 2195, 2302, and 2425</li> </ul>

<p>work experience in a Francophone environment.</p> <ul style="list-style-type: none"> <li>• Additional credit hours in French, if needed, to bring the total to 24.</li> </ul> <p>It is recommended that a student complete at least one of French 2900, 3650, 3651, 3653, 3654.</p> <p>An applicant with French as focus area must have written the <a href="#">DEL F</a> Tout Public (Level B2) and achieved an overall grade of at least 70%, with no less than 60% in any one skill area of the exam.</p> <p><u>This focus area is typically not available in the Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education. For further information please contact the Academic Programs Office.</u></p>	
<ul style="list-style-type: none"> <li>• <b>History (18 credit hours)</b></li> <li>• 3 credit hours in History at the 1000 level</li> <li>• 9 credit hours in History at the 2000 level</li> <li>• 6 credit hours in Newfoundland and Labrador History at the 3000 level</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Interdisciplinary Studies (18-24 credit hours)</b></li> <li>• Non-Education courses for cohorts in special offerings of the program approved by the Faculty of Education. For information on Interdisciplinary Studies Focus Areas students should contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Linguistics (18 credit hours)</b></li> <li>• Linguistics 1100</li> <li>• Linguistics 1103</li> <li>• Linguistics 1104</li> <li>• Linguistics 2210</li> <li>• 6 credit hours chosen from Linguistics 3000, 3100, 3104, 3105, 3150, 3155, 3201, 3210, 3500, 3850</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Mathematics (18 credit hours)</b></li> <li>• No more than 6 credit hours in Mathematics at the 1000 level and at least 3 credit hours in Mathematics at the 3000 level.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Music (18 credit hours)</b></li> <li>• Music 1106 or 1120</li> <li>• 3 credit hours chosen from Music 2011, 2012, 2013, 2014</li> <li>• 3 credit hours chosen from Music 2021, 2022, 2023, 2611, 2612, 2613, 2614, 2619 (admission to 2612, 2613 and 2619 is by audition only)</li> <li>• 6 credit hours chosen from Music 3014, 3015, 3016, 3017, 3018, 3019, 4040</li> <li>• 3 additional credit hours from the courses in 2nd and 4th clauses above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Physical Education (18 credit hours)</b></li> <li>• Human Kinetics and Recreation 1000, 2210, 2300</li> <li>• 9 credit hours chosen from Human Kinetics and Recreation 2002, 2310 or 2311, 2320, 2600, 2601, 3330, 3340, 3400, 3490</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Religious Studies (18 credit hours)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Science (18 credit hours)</b></li> </ul>

<ul style="list-style-type: none"> <li>• Religious Studies 1000</li> <li>• 3 credit hours chosen from Religious Studies 2013, the former 2130, the former 2140, 2330, 2340</li> <li>• 3 credit hours chosen from Religious Studies 2400, 2410, 2420, 2425, 2430</li> <li>• 3 credit hours chosen from Religious Studies 2350, 2610, 2810, 2811, 2812, the former 2820, 2830</li> <li>• 6 credit hours in Religious Studies at the 3000 level or above</li> </ul>	<ul style="list-style-type: none"> <li>• At least 6 credit hours in each of two subject areas selected from Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, or Physics.</li> <li>• At least 6 credit hours used to meet this requirement must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Theatre Arts (18 credit hours)</b></li> <li>• For information on the Theatre Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Visual Arts (18 credit hours)</b></li> <li>• Courses in Art History may be used to satisfy this requirement in whole or in part. For information on the Visual Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>

Page 105, 2018-2019 Calendar, under the heading 9.7 Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, amend the section as follows:

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

This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the [Office of Undergraduate Programs](#).

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

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

Phase I (September -	Phase II (January - May)	Phase III (September -	Phase IV (January - May)
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December)		December)	
ED 410T ED 4100	ED 420T ED 4200 ED 4600 <del>ED 4690</del> <del>ED 4691</del> <u>Four credit hours in institutes in STEM Education (4660-4680, 4690-4699)</u>	ED 440T ED 4400	ED 4500 <del>ED 4692</del> <del>ED 4693</del> <u>Four credit hours in institutes in STEM Education (4660-4680, 4690-4699)</u>

Page 102, 2018-2019 Calendar, under the heading 9.5 Bachelor of Education (Primary/Elementary) as a First Degree, amend Table 6 as follows:

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

<ul style="list-style-type: none"> <li>• <b>English (24 credit hours)</b></li> <li>• 6 credit hours in English at the 1000 level</li> <li>• English 2390 or 3395</li> <li>• 3 credit hours chosen from English 2000, 2001, 2005-2007, 3200, 3201, 3205</li> <li>• 3 credit hours chosen from English 2002-2004, 2010 or the former 2020, 2350, 2351</li> <li>• 6 credit hours chosen from English 2146, 2150, 2151, 2155, 2156, 2160, 3145, 3147-3149, 3152, 3155-3158</li> <li>• 3 additional credit hours in English at the 2000 level or above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Folklore (24 credit hours)</b></li> <li>• Folklore 1000</li> <li>• Folklore 2100, 2300, 2401, 2500</li> <li>• 9 credit hours in Folklore at the 3000 or 4000 level</li> </ul>
<ul style="list-style-type: none"> <li>• <b>French (24 credit hours)</b></li> <li>• A maximum of 6 credit hours at the 1000 level</li> <li>• French 2100 or equivalent</li> <li>• French 2101 or equivalent</li> <li>• French 2300 or equivalent</li> <li>• 6 credit hours chosen from French 2601, 2602, 2900 or equivalent</li> <li>• French 3100 or French 3101 or equivalent</li> <li>• At least four weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment.</li> <li>• Additional credit hours in French, if needed, to bring the total to 24.</li> </ul> <p>It is recommended that a student complete at least one of French 2900, 3650, 3651, 3653, 3654.</p> <p>An applicant with French as focus area must have written the <a href="#">DELFT</a> Tout Public (Level B2) and achieved an overall grade of at least 70%, with no less than 60% in any one skill area of the exam.</p>	<ul style="list-style-type: none"> <li>• <b>Geography (18 credit hours)</b></li> <li>• Geography 1050, 2001, 2102, 2195, 2302, and 2425</li> </ul>
<ul style="list-style-type: none"> <li>• <b>History (18 credit hours)</b></li> <li>• 3 credit hours in History at the 1000 level</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Interdisciplinary Studies (18-24 credit hours)</b></li> </ul>



<ul style="list-style-type: none"> <li>• 9 credit hours in History at the 2000 level</li> <li>• 6 credit hours in Newfoundland and Labrador History at the 3000 level</li> </ul>	<ul style="list-style-type: none"> <li>• Non-Education courses for cohorts in special offerings of the program approved by the Faculty of Education. For information on Interdisciplinary Studies Focus Areas students should contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Linguistics (18 credit hours)</b></li> <li>• Linguistics 1100 <u>or 1155 (Linguistics 1155 is recommended)</u></li> <li>• Linguistics 1103</li> <li>• Linguistics 1104</li> <li>• Linguistics 2210</li> <li>• 6 credit hours chosen from Linguistics 3000, 3100, 3104, <del>3105, 3150</del>, 3155, 3201, 3210, 3500, 3850</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Mathematics (18 credit hours)</b></li> <li>• No more than 6 credit hours in Mathematics at the 1000 level and at least 3 credit hours in Mathematics at the 3000 level.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Music (18 credit hours)</b></li> <li>• Music 1106 or 1120</li> <li>• 3 credit hours chosen from Music 2011, 2012, 2013, 2014</li> <li>• 3 credit hours chosen from Music 2021, 2022, 2023, 2611, 2612, 2613, 2614, 2619 (admission to 2612, 2613 and 2619 is by audition only)</li> <li>• 6 credit hours chosen from Music 3014, 3015, 3016, 3017, 3018, 3019, 4040</li> <li>• 3 additional credit hours from the courses in 2nd and 4th clauses above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Physical Education (18 credit hours)</b></li> <li>• Human Kinetics and Recreation 1000, 2210, 2300</li> <li>• 9 credit hours chosen from Human Kinetics and Recreation 2002, 2310 or 2311, 2320, 2600, 2601, 3330, 3340, 3400, 3490</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Religious Studies (18 credit hours)</b></li> <li>• Religious Studies 1000</li> <li>• 3 credit hours chosen from Religious Studies 2013, the former 2130, the former 2140, 2330, 2340</li> <li>• 3 credit hours chosen from Religious Studies 2400, 2410, 2420, 2425, 2430</li> <li>• 3 credit hours chosen from Religious Studies 2350, 2610, 2810, 2811, 2812, the former 2820, 2830</li> <li>• 6 credit hours in Religious Studies at the 3000 level or above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Science (18 credit hours)</b></li> <li>• At least 6 credit hours in each of two subject areas selected from Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, or Physics.</li> <li>• At least 6 credit hours used to meet this requirement must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Theatre Arts (18 credit hours)</b></li> <li>• For information on the Theatre Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Visual Arts (18 credit hours)</b></li> <li>• Courses in Art History may be used to satisfy this requirement in whole or in part. For information on the Visual Arts Focus Area contact the Undergraduate Admissions Office, Faculty of Education.</li> </ul>

Page 91, 2018-2019 Calendar, under the heading 8 Admission/Readmission Regulations for the Faculty of Education, add the following new number 12 to the section:

**“8 Admission/Readmission Regulations for the Faculty of Education**

12. Transfer credit cannot be awarded for the following courses: ED 3600, ED 3650”

51.5 Faculty of Engineering and Applied Science

Page 119, 2018-2019 Calendar, under the heading 4.1 Program of Study, amend the section and renumber subsequent clauses accordingly:

**“4.1 Program of Study**

1. Courses in the engineering program are normally taken in Academic Terms as shown in the appropriate program table. Students must satisfy the criteria for promotion as described below under **Promotion Regulations** to remain in the Engineering program.
2. The Engineering Program consists of eight academic terms and four to six work terms. The first-year of the Engineering Program, known as Engineering One, forms a core that is common to all majors. All students must successfully complete the requirements of Engineering One prior to being promoted to Academic Term 3.
3. To be eligible for registration for ENGI 001W in the Spring semester after completing Engineering One, students are expected to complete the pre-requisite ENGI 200W in the Fall semester of Engineering One. All other Engineering One students are expected to complete ENGI 200W in the Winter semester of Engineering One.”

Page 124, 2018-2019 Calendar, under the heading 6.1.1 Civil Engineering Major, amend the first three rows of Table 1 as follows:

**Table 1 Civil Engineering Major**

Term	Required Courses	Elective Courses
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040 Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	Students who are expecting to complete the Engineering One requirements <u>during the first two semesters by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <u>must is expected to</u> be completed during the <u>Winter-Fall</u> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program, Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	ENGI 3101 ENGI 3425 ENGI 3610 ENGI 3703 ENGI 3731 ENGI 3934	<u>ENGI 200W (if not completed during Engineering One).</u>

Faculty of Engineering and Applied Science (cont'd)

Page 125, 2018-2019 Calendar, under the heading 6.2.1 Computer Engineering Major, amend the first three rows of Table 2 as follows:

**Table 2 Computer Engineering Major**

Term	Required Courses	Elective Courses
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040 Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	Students who are expecting to complete the Engineering One requirements <del>during the first two semesters</del> <u>by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <del>must</del> <u>is expected to</u> be completed during the <del>Winter-Fall</del> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program, Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	ENGI 3101 ENGI 3424 ENGI 3821 ENGI 3861 ENGI 3891 Physics 3000	<del>ENGI 200W (if not completed during Engineering One).</del>

Page 126, 2018-2019 Calendar, under the heading 6.3.1 Electrical Engineering, amend the first three rows of Table 3 as follows:

**Table 3 Electrical Engineering Major**

Term	Required Courses	Elective Courses
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040 Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	Students who are expecting to complete the Engineering One requirements <del>during the first two semesters</del> <u>by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <del>must</del> <u>is expected to</u> be completed during the <del>Winter-Fall</del> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program,</b>		

<b>Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	ENGI 3101 ENGI 3424 ENGI 3821 ENGI 3861 ENGI 3891 Physics 3000	<del>ENGI 200W (if not completed during Engineering One).</del>

Page 128, 2018-2019 Calendar, under the heading 6.4.1 Mechanical Engineering Major, amend the first three rows of Table 4 as follows:

**Table 4 Mechanical Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040 Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	Students who are expecting to complete the Engineering One requirements <del>during the first two semesters</del> <u>by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <del>must</del> <u>is expected to</u> be completed during the <del>Winter-Fall</del> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program, Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	ENGI 3101 ENGI 3424 ENGI 3901 ENGI 3911 ENGI 3934 ENGI 3941	<del>ENGI 200W (if not completed during Engineering One).</del>

Page 130, 2018-2019 Calendar, under the heading 6.5.1 Ocean and Naval Architectural Engineering Major, amend the first three rows of Table 5 as follows:

**Table 5 Ocean and Naval Architectural Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040	Students who are expecting to complete the Engineering One requirements <del>during the first two semesters</del> <u>by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <del>must</del> <u>is expected to</u> be completed during the

	Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	<del>Winter-Fall</del> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program, Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	ENGI 3001 ENGI 3054 ENGI 3101 ENGI 3901 ENGI 3934 Mathematics 2000	<del>ENGI 200W (if not completed during Engineering One).</del>

Page 131, 2018-2019 Calendar, under the heading 6.6.1 Process Engineering Major, amend the first three rows of Table 6 as follows:

**Table 6 Process Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Engineering One</b>	Chemistry 1050 English 1090 or the former English 1080 ENGI 1010 ENGI 1020 ENGI 1030 ENGI 1040 Mathematics 1000 Mathematics 1001 Mathematics 2050 Physics 1050 Physics 1051	Students who are expecting to complete the Engineering One requirements <del>during the first two semesters</del> <u>by the end of the Winter semester</u> may apply to undertake a work term during the Spring semester. In this case, the prerequisite course ENGI 200W <del>must</del> <u>is expected to</u> be completed during the <del>Winter-Fall</del> semester. <u>All other students are expected to complete ENGI 200W in the Winter semester of Engineering One.</u>
In addition to meeting the requirements outlined below, a student must successfully complete four Complementary Studies courses as described under <b>Description of Program, Complementary Studies.</b>		
<b>Fall Academic Term 3</b>	Chemistry 1051 ENGI 3101 ENGI 3424 ENGI 3600 ENGI 3901 ENGI 3911	<del>ENGI 200W (if not completed during Engineering One).</del>

Page 135, 2018-2019 Calendar, under the heading 11.1 Work Terms and Non-Credit Courses, amend the section as follows:

**“200W Work Term Preparation and Professional Development Seminars** ~~are offered during the Fall and Winter semesters prior to a student’s first work term. These seminars introduce the co-operative~~

Faculty of Engineering and Applied Science (cont'd)

~~education process and prepare the student for work terms.~~ introduces the Co-operative Education process and professional development, and prepares the student for work terms. This course is designed to assist students to apply for, interview and obtain the first work term, as well as to be prepared for a professional work environment. It is a one semester course offered during the Fall and Winter semesters of Engineering One, prior to a student's first work term competition. This course is ~~These seminars are~~ graded PAS or FAL.

AR: attendance is required

CH: 0

LC: as scheduled

**Abbreviated Course Title:** Work Term Preparation & PD”

Page 138, 2018-2019 Calendar, under the heading 11.5 Academic Term 5 Courses, amend the section as follows:

**“5800 Electrical Engineering Design** students work, normally in pairs, on small design projects that require them to follow a hierarchical design process including general product definition, specifications and requirements, functional-block diagrams, specification of functional blocks for circuit-level synthesis and implementation, system integration, simulation or modelling, testing and verification. The small projects are designed to encourage and motivate students to learn and practise the process of design. The course culminates in a large design project.

CO: ENGI 5821, ENGI 5854

LC: 18 lecture hours per semester

OR: meetings with project supervisor as required

LH: ten 3-hour sessions per semester

PR: ENGI 4841, ENGI 4854, ENGI 4862

**5821 Control Systems I** includes an introduction to control systems with negative feedback; mathematical modelling and transfer functions of electromechanical systems; block diagram and signal flow graphs; controller realization; transient response analysis; Routh's stability criterion; basic control actions and response of control systems; root locus analysis and design; frequency response analysis; Bode diagram; gain and phase margins; compensator design in frequency domain; Nyquist stability criterion; digital implementations of analog compensators; and an introduction to PID controller tuning methods.

~~CO: ENGI 5854~~

LH: four 3-hour sessions per semester

PR: ENGI 4823”

Page 120, 2018-2019 Calendar, under the heading 4.3.5 Ocean and Naval Architectural Engineering, amend the section as follows:

Faculty of Engineering and Applied Science (cont'd)

**“4.3.5 Ocean and Naval Architectural Engineering**

[www.mun.ca/engineering/ona](http://www.mun.ca/engineering/ona)

Ocean and Naval Architectural Engineering covers aspects of both naval architecture and ocean engineering. The Ocean and Naval Architectural Engineering major is the only accredited undergraduate program specifically in naval architecture/ocean engineering in Canada. The major is designed to provide education to work in marine transport, ship and boat building, offshore engineering, submersibles design and many related marine areas. The undergraduate program is also a comprehensive preparation for graduate studies, research and consulting in ocean engineering.

Naval Architecture is primarily concerned with the design and construction of ships, offshore structures and other floating equipment and facilities. Ocean Engineering extends this focus to cover virtually all aspects of engineering related to the world's oceans. Topics including sub-sea systems and oceanographic science add core ocean engineering content to the program.

Students in the Ocean and Naval Architectural Engineering major also have the opportunity to undertake a minor in Mathematics.”

Page 130, 2018-2019 Calendar, under the heading 6.5.1 Ocean and Naval Architectural Engineering Major, amend the section as follows:

**“6.5.1 Ocean and Naval Architectural Engineering Major**

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Ocean and Naval Architectural Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms ~~in the academic terms~~ and order as set out in Table 5 Ocean and Naval Architectural Engineering Major.
- Work terms shall normally be taken in the order as set out in Table 5 Ocean and Naval Architectural Engineering Major.

• Ocean and Naval Architectural Engineering students may complete a minor in Mathematics as outlined under **Faculty of Science, Mathematics, Minor in Mathematics.**”

51.6 School of Human Kinetics and Recreation

Page 243, 2018-2019 Calendar, under the heading 12 Course Descriptions, amend the section as follows:

School of Human Kinetics and Recreation (cont'd)

**“4575 Recreation Ethics, Issues and Trends** explores contemporary trends and issues identified by governments and recreation practitioners and the way in which these issues influence the delivery of leisure services.

CR: HKR 4410, HKR 4420, HKR 4685

PR: successful completion of a minimum of 78 credit hours

**4685 Professional Issues in Therapeutic Recreation** is designed to facilitate an in-depth exploration and analysis of philosophical issues and interdisciplinary theories and to discuss how they relate to therapeutic recreation practice and research. The course will be conducted as a seminar and students will be responsible for reading course materials and leading discussions on various topics. The ultimate goal of the course is to prepare the student to enter the profession confident in the ability to provide exemplary TR services.

CR: HKR 4410, HKR 4420, HKR 4575

PR: HKR 2505 and HKR 2585, successful completion of a minimum of 78 credit hours”

Page 233, 2018-2019 Calendar, under the heading 4.1 General Degree, amend the section as follows:

**“4.1 General Degrees**

The School of Human Kinetics and Recreation offers five ~~general~~ degrees in four program areas. For specific details on each degree refer to the appropriate Program Regulations - General and Honours Degrees.”

Page 235, 2018-2019 Calendar, under the heading 5.3.2 Memorial University of Newfoundland Applicants, amend the section as follows:

**“5.3.2 Memorial University of Newfoundland Applicants**

To be eligible for consideration for admission to all programs, students who are attending or have previously attended this University must have a cumulative average of 60% or an average of 65% on their last 30 credit hours.

Overall academic performance is an important criterion in reaching decisions on applications for admission, and will be considered, in the selection process.

~~In addition to overall academic achievement and evidence of ability to successfully maintain a full course load, admission decisions shall normally include a review of the applicant's average in the following 15 credit hours:~~



School of Human Kinetics and Recreation (cont'd)

~~Kinesiology and Physical Education Applicants: 6 credit hours in Critical Reading and Writing (CRW) designated courses; 6 credit hours in Mathematics, or Mathematics 1000 and 3 credit hours in a complementary study course; and HKR 2000 or a complementary study course.~~

~~Recreation Applicants: 6 credit hours in Critical Reading and Writing (CRW) designated courses; 6 credit hours in Psychology; and HKR 2000 or a complementary study course.~~

~~A maximum of one repeated course may be included among the 15 admission credit hours.~~

Students who are attending or have previously attended this University are not required to submit a copy of their transcript with their application(s).”

51.7 Faculty of Humanities and Social Sciences Housekeeping Calendar Changes

Page 257, 2018-2019 Calendar, under the heading 6.1.2.2 Critical Reading and Writing (CRW) Requirement, amend the section as follows:

**“6.1.2.2 Critical Reading and Writing (CRW) Requirement**

The Critical Reading and Writing Requirement (CRW) is designed to ensure that students develop university-level foundational knowledge and skills in critical reading and writing in the Humanities and/or Social Sciences, as described in the CRW course guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw). To fulfill the Critical Reading and Writing Requirement, a student must complete a minimum of 6 credit hours in foundational Critical Reading and Writing courses. This shall include 3 credit hours in a 1000-level CRW course offered by English, and an additional 3 credit hours in any Faculty of Humanities and Social Sciences course whose title begins with “Critical Reading and Writing” chosen from the following eligible courses: Archaeology 1001, 1005, Classics 1001, English 1090 or the former 1080, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103, 1110, Folklore 1005, Gender Studies 1005 or the former 2005, German 1010, History 1005, 1007, 1009-1015, 1300, 1301, Philosophy 1010, 1011, Political Science 1001, Religious Studies 1001. Courses offered at Grenfell Campus using these course numbers are only eligible if they meet the CRW criteria specified above.”

Page 276, 2018-2019 Calendar, under the heading 8.1 General Regulations for Certificate Programs, amend the section as follows:

Faculty of Humanities and Social Sciences Housekeeping Calendar Changes (cont'd)

**“8.1 General Regulations for Certificate Programs**

1. A certificate program is administered by a Program Coordinator. The Coordinator is normally affiliated with the Faculty of Humanities and Social Sciences department that is primarily responsible for the Program's administration.
2. Certificate programs consist of between 18 and 21 credit hours in courses as specified in individual programs. ~~A maximum of~~ No more than 6 credit hours at the 4000-level shall be required. Additional 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs. Prerequisites may apply.”

Page 347, 2018-2019 Calendar, under the heading 15.6 English, amend the section as follows:

**“1020 Writing for Second Language Students I** is an introduction to the use of English with emphasis on composition for non-native English-speaking students. This course is for students whose first language is not English and who have passed 102F or have attained a standard acceptable to the ~~Department on the English Placement Test~~ University on an approved language proficiency exam such as IELTS, TOEFL or CAEL. Students who have passed ENGL 1020 may take as their second English course one of ENGL 1021, 1090, 1191, 1192, or 1193. Students completing this course may elect to use it with ENGL 1021 to fulfill the Bachelor of Arts Language Study Requirement.

CR: the former ENGL 1030, ENGL 1110. Students may not receive credit for more than 6 credit hours in English courses at the 1000 level (this includes unspecified 1000-level English transfer credits), except ENGL 1020 and 1021 if they are used to fulfill the Bachelor of Arts Language Study Requirement.

~~PR: Admission to this course will be determined on the basis of the departmental English Placement Test or successful completion of ENGL 102F.”~~

Page 383, 2018-2019 Calendar, under the heading 15.29 Sociology, amend the section as follows:

**“3306 Young Offenders and Youth Justice** (same as Police Studies 3306) provides an introduction to the youth justice system. The course examines the evolution and impact of youth justice philosophy and legislation in Canada and the experiences of youth at various stages within the system. Topics may include: youth crime measurement, the social profile of young offenders, information sources about youth crime, theories of youth delinquency, and issues affecting young people (e.g. homelessness, substance use, mental illness, gang involvement).

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CR: Police Studies 3306

PR: SOCI 1000 or Police Studies 1000”

Page 257, 2018-2019 Calendar, under the heading 6.1.2.3 Language Study (LS) Requirement, amend the section as follows:

**“6.1.2.3 Language Study (LS) Requirement**

The Language Study (LS) Requirement is designed to ensure that students develop university-level foundational knowledge of the structure of a language other than English, and to foster awareness of the inherent link between language and cultural literacy, as described in the LS course guidelines available at [www.mun.ca/hss/ls](http://www.mun.ca/hss/ls). To fulfill the Language Study Requirement, a student must complete a minimum of 6 credit hours in the study of a single language, other than English, chosen from one of the following languages taught in the Faculty of Humanities and Social Sciences: **Ancient Greek, French, German, Hebrew, Innu-aimun, Inuktitut, Italian, Japanese, Latin, Mandarin Chinese, Russian, Sanskrit, Spanish** or another language that may be offered by the Faculty. Not all courses in the Department of Modern Languages, Literatures and Cultures or other departments qualify and it is a student's responsibility to refer to the department's or course's Calendar entry. The guidelines for LS courses are maintained by the Faculty's Curriculum and Programs Committee.”

Page 386, 2018-2019 Calendar, under the heading 15.29.1 Police Studies, amend the section as follows:

**“3306 Young Offenders and Youth Justice** (same as Sociology 3306) provides an introduction to the youth justice system. The course examines the evolution and impact of youth justice philosophy and legislation in Canada and the experiences of youth at various stages within the system. Topics may include: youth crime measurement, the social profile of young offenders, information sources about youth crime, theories of youth delinquency, and issues affecting young people (e.g. homelessness, substance use, mental illness, gang involvement).

CR: Sociology 3306

PR: PLST 1000 or Sociology 1000”

Page 319, 2018-2019 Calendar, under the heading 14.14.2.8 Canadian Third Year in Nice Program, amend the section as follows:

**“14.14.2.8 Canadian Third Year In Nice Program**

Memorial University of Newfoundland is a member of a consortium of Canadian universities (with Guelph University, University of Toronto,

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University of Western Ontario, University of Windsor), which offer the Canadian Third Year in Nice Program. This program enables students to spend a full academic year studying at the Université de Nice-Sophia Antipolis in the South of France. Canadian Students participating in this program are accompanied by a faculty member from one of the Canadian universities participating in the program. This person teaches two of the five courses which students complete each semester in Nice, the other three being chosen from the offerings of the Université de Nice. Specific Memorial University of Newfoundland transfer credits are awarded for successful completion of the courses taught by the Canadian coordinator and specified and/or unspecified credits are awarded for the courses offered by the Université de Nice. All courses completed under this program will be offered outside the normal time frame for courses offered at Memorial University of Newfoundland. Fall semester courses will be completed between October and January each year, Winter semester courses between February and May. This follows the time frame of Sessions I and II at the Université de Nice-Sophia Antipolis. Students should consult the Head of the Department regarding course selection.

L'université Memorial fait partie du consortium des universités canadiennes qui offrent le programme Canadian Third Year in Nice (avec Guelph University, University of Toronto, University of Western Ontario, University of Windsor). Ce programme permet à des étudiants et étudiantes de passer une année académique à l'université de Nice-Sophia Antipolis dans le sud de la France. Les étudiant/e/s canadien/ne/s qui participent à ce programme sont encadrés par un/e professeur/e d'une des universités qui participent à ce programme. Chaque semestre, cette personne enseigne deux cours sur les cinq. Les trois autres cours sont choisis parmi les cours enseignés à l'université de Nice. Les cours de l'enseignant/e canadien/ne donneront droit à des crédits spécifiés, alors que les cours offerts à Nice donneront droit à de transfert crédits spécifiés et/ou non spécifiés. Le calendrier sera différent de celui de l'université Memorial: les cours d'automne auront lieu de septembre à janvier et ceux d'hiver de février à mai, suivant le calendrier des sessions I et II de l'université de Nice-Sophia Antipolis. Les étudiants et étudiantes doivent consulter la direction du département concernant le choix des cours.

Students wanting to complete the ~~Freeker Program~~ Canadian Third Year in Nice Program may wish to follow [Table 5 Course Pattern for Major in French, Nice \(Entry Point FREN 1501\)](#) below."

Page 263, 2018-2019 Calendar, under the heading 6.2.5.3 International Internship Option, amend the section as follows:

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**6.2.5.3 International Internship Option**

4. A student must apply to Co-operative Education ~~at least eight months before commencing work for the internship.~~ Deadline dates are January 15 (or next business day) for Fall internships, and May 15 (or next business day) for Winter internships.

Page 256, 2018-2019 Calendar, under the heading 6.1.2.1 Breadth of Knowledge Requirement, amend the section as follows:

**“6.1.2.1 Breadth of Knowledge Requirement**

1. The Breadth of Knowledge Requirement is designed to ensure that students have exposure to courses in a variety of disciplines and interdisciplinary areas of study within the Humanities and Social Sciences, in order to achieve a well-rounded Humanities and Social Sciences education. To fulfill the Breadth of Knowledge Requirement, a student's Bachelor of Arts program (core, major, minor and electives) ~~must complete~~ contain at least one course in a minimum of 6 of the following areas of study in the Humanities and/or Social Sciences, chosen from: Anthropology, Archaeology, Classics, Communication Studies, Economics, English, Folklore, French, Gender Studies, Geography, German, History, Law and Society, Linguistics, Medieval Studies, Philosophy, Police Studies, Political Science, Religious Studies, Russian, Sociology, Spanish courses. ~~Humanities and/or Social Sciences courses used to meet the CRW, LS, and QR requirements and/or the student's Major or Minor requirements may also be used towards this requirement.”~~

51.8 Faculty of Humanities and Social Sciences Calendar Changes

Page 388, 2018-2019 Calendar, under the heading 15.31 University, amend the section as follows:

**“15.31 University**

~~University courses are designated by UNIV.~~

~~1010 The University Experience helps students develop the skills and strategies that will benefit them as they make the transition from high school to university. Class activities and assignments focus on critical and creative thinking, communication skills, self-awareness, information literacy, and the ability to work in teams. Students will explore the campus community and examine the role the university plays in our society.~~

~~UL: not eligible for treatment as Faculty of Humanities and Social Sciences credit hours in any program offered by the Faculty.~~

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~~1020 Critical Reading and Writing: A Path to Future Studies broadens students' understanding of the multi-disciplinary nature of the university. Concentrating on reading and writing activities in multiple media, students will see how dialogue and text are involved in defining, creating, supporting, debating, refining, and disseminating research-based knowledge. The course offers students an opportunity to improve their own skills in an active and collaborative learning environment. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw).~~

~~CR: the former UNIV 2020~~

~~UL: not eligible for treatment as Faculty of Humanities and Social Sciences credit hours in any program offered by the Faculty.~~

~~1500 Introduction to Critical Reading and Writing in University introduces students to some of the processes, techniques and standards of university-level critical reading and writing. Students will engage in the practices of critical reading and pre-writing, drafting, revising and editing texts. An emphasis will be placed on using writing in response to critical reading exercises. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw).~~

~~CR: the former Arts 1500~~

~~PR: restricted to students with fewer than eighteen credit hours~~

~~UL: not eligible for treatment as Faculty of Humanities and Social Sciences credit hours in any program offered by the Faculty.”~~

Page 257, 2018-2019 Calendar, under the heading 6.1.2.2 Critical Reading and Writing (CRW) Requirement, amend the section as follows:

**“6.1.2.2 Critical Reading and Writing (CRW) Requirement**

The Critical Reading and Writing Requirement (CRW) is designed to ensure that students develop university-level foundational knowledge and skills in critical reading and writing in the Humanities and/or Social Sciences, as described in the CRW course guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw). To fulfill the Critical Reading and Writing Requirement, a student must complete a minimum of 6 credit hours in foundational Critical Reading and Writing courses. This shall include 3 credit hours in a 1000-level CRW course offered by English, and an additional 3 credit hours in any Faculty of Humanities and Social Sciences course whose title begins with “Critical Reading and Writing” chosen from the following eligible courses: Archaeology 1001, Classics 1001, English 1090 or the former 1080, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103, 1110, Gender Studies 1005 or the former 2005, German 1010, History 1005, 1007, 1009-1015, 1300, 1301, Philosophy 1010, 1011, Political Science 1001, Religious Studies 1001, ~~University 1020, 1500~~. Courses offered at

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Grenfell Campus using these course numbers are only eligible if they meet the CRW criteria specified above.”

Page 259, 2018-2019 Calendar, under the heading 6.1.7 Limit on Certain Credit Hours, amend the section as follows:

**“6.1.7 Limit on Certain Credit Hours**

1. Eligible credit hours may be used to jointly fulfill the requirements of the Major or Minor and any of the Bachelor of Arts Core Requirements, the iBA additional requirements, a diploma and/or certificate program, subject to certain limitations, including:
  - a. Credit hours cannot be used to jointly fulfill the requirements of more than one Honours or Major program.
  - b. Credit hours cannot be used to jointly fulfill the requirements of both a Major and a Minor program.
  - c. Credit hours cannot be used to jointly fulfill the requirements of all three of a Major or Minor, a diploma and a certificate program. In the event that a course is required in all three programs, and no alternate course option exists, a student shall be guided by [Waiver of Regulations for Undergraduate Students - Other Regulations](#).
2. Additional credit may not be obtained for completing two versions of a crosslisted course (i.e., the same course delivered by two or more academic units).
3. ~~Students can receive credit for only two English courses at the 1000-level: one of English 1000 or 1090 or the former 1080, and one of 1001, 1191 or the former 1101, 1192 or the former 1102, 1193 or the former 1103 or 1110. Students whose first language is not English and who do not meet the standards for entry into regular first-year English courses, and who elect to use English 1020 and 1021 to fulfill the [Language Study](#) requirement, may complete up to an additional 6 credit hours in English courses at the 1000-level. These limits also apply to unspecified credit hours transferred from other institutions.~~
3. Students in the Faculty of Humanities and Social Sciences can receive no more than six credit hours in Critical Reading and Writing courses at the same academic level in any single discipline.
4. Credit hours awarded for field placement courses in certain Diploma programs are not eligible towards a Bachelor of Arts. This includes English 5000, the former Philosophy 5000, and the former Police Studies 5000.”

Page 347, 2018-2019 Calendar, under the heading 15.6 English, amend the section as follows:

**“1020 Writing for Second Language Students I** is an introduction to the use of English with emphasis on composition for non-native English-speaking students. This course is for students whose first language is not



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English and who have passed 102F or have attained a standard acceptable to the ~~Department on the English Placement Test~~ University on an approved language proficiency exam such as IELTS, TOEFL or CAEL. Students who have passed ENGL 1020 may take as their second English course one of ENGL 1021, 1090, 1191, 1192, or 1193. Students completing this course may elect to use it with ENGL 1021 to fulfill the Bachelor of Arts [Language Study Requirement](#).

CR: the former ENGL 1030, ENGL 1110. ~~Students may not receive credit for more than 6 credit hours in English courses at the 1000 level (this includes unspecified 1000 level English transfer credits), except ENGL 1020 and 1021 if they are used to fulfill the Bachelor of Arts~~ **Language Study Requirement**.

PR: Admission to this course will be determined on the basis of the departmental English Placement Test or successful completion of ENGL 102F.

**1021 Writing for Second Language Students II** develops skills in critical reading and writing of academic English, with emphasis on research and writing syntheses from sources, for non-native English-speaking students. Students completing this course may elect to use it with ENGL 1020 to fulfill the Bachelor of Arts **Language Study Requirement**.

~~CR: Students may not receive credit for more than 6 credit hours in English courses at the 1000 level (this includes unspecified 1000 level English transfer credits), except ENGL 1020 and 1021 if they are used to fulfill the Bachelor of Arts~~ **Language Study Requirement**.

PR: ENGL 1020

**1090 Critical Reading and Writing: Telling Stories** is a foundational course for all university programs undertaken at Memorial University of Newfoundland, since understanding how stories work is fundamental to all disciplines. This course focuses on the language we encounter in our reading and use to record our reading experiences. Emphasis is placed on critical reading and writing: analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw).

CR: ENGL 1000 or the former 1080. ~~Except for the purposes of fulfilling a Critical Reading and Writing requirement, credit may not be received for more than 6 credit hours in first-year courses in English (this includes unspecified first-year transfer credits).~~

**1110 Critical Reading and Writing in Rhetoric** is an examination of prose texts such as essays, articles and reviews. Students write for different purposes and audiences. Emphasis is placed on critical reading and writing: analyzing texts, framing and using questions, constructing



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essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw) and build on foundational Critical Reading and Writing content delivered in ENGL 1090.

CR: ENGL 1020, the former ENGL 1030. ~~Credit may not be received for more than 6 credit hours in English courses at the 1000 level (this includes unspecified 1000-level English transfer credits).~~

PR: ENGL 1000, 1090, or the former 1080

**1191 Critical Reading and Writing: Self and Society** studies a variety of texts that explore the interaction between individual desires and social identities. Building on foundational critical reading and writing skills acquired in English 1090, students gain further experience with analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw) and build on foundational CRW content delivered in ENGL 1090. Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the **Breadth of Knowledge Requirement**, unless pursuing a Major or Minor in English.

CR: ENGL 1110 and the former ENGL 1030, 1101, 1102, 1103. ~~Except for the purposes of fulfilling a Critical Reading and Writing requirement, credit may not receive for more than 6 credit hours in first-year courses in English (this includes unspecified first-year transfer credits).~~

PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090

**1192 Critical Reading and Writing: Imagined Places** studies a variety of texts that explore imaginary (or imaginatively reconstructed) places and the responses of the humans who inhabit them. Building on foundational critical reading and writing skills acquired in English 1090, students gain further experience with analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw). Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the **Breadth of Knowledge Requirement**, unless pursuing a Major or Minor in English.

CR: ENGL 1110, and the former ENGL 1101, 1102, 1103. ~~Except for the purposes of fulfilling a Critical Reading and Writing requirement, credit may not receive for more than 6 credit hours in first-year courses in English (this includes unspecified first-year transfer credits).~~

PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090

Faculty of Humanities and Social Sciences Calendar Changes (cont'd)

**1193 Critical Reading and Writing: Ways of Reading** focuses on the process of reading, on specific strategies and approaches that we take in our encounters with texts and on the ways we report those encounters. Building on foundational critical reading and writing skills acquired in English 1090, students gain further experience analyzing texts, framing and using questions, constructing essays, organizing paragraphs, conducting research, quoting and documenting, revising and editing. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw). Bachelor of Arts students should normally choose the second Critical Reading and Writing course from a discipline listed in the **Breadth of Knowledge Requirement**, unless pursuing a Major or Minor in English.

CR: ENGL 1110 and the former ENGL 1101, 1102, 1103. ~~Except for the purposes of fulfilling a Critical Reading and Writing requirement, credit may not receive for more than 6 credit hours in first year courses in English (this includes unspecified first year transfer credits).~~

PR: ENGL 1000 or 1020 or the former 1030 or the former 1080 or 1090”

Page 286, 2018-2019 Calendar, under the heading 13 Dean's List, add a new section as follows:

**“13.3 Dean's Award for Academic Excellence**

A student named to the HSS Dean's List a fourth time will receive a transcript notation of “Dean's Award for Academic Excellence in Humanities and Social Sciences”.

Page 286, 2018-2019 Calendar, under the heading 12.4 Transfer From Other Post-Secondary Institutions, amend the section as follows:

**“12.2 Transfers From Other Post-Secondary Institutions**

The following Faculty of Humanities and Social Sciences regulations are in addition to **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)**.

1. As per **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)**, Graduation, a student who completes fewer than one-half of the credit hours required for the degree is eligible only to obtain an "unclassified" degree. For these students, at least one-half of the minimum number of credit hours required for a Major (or a second Major) and at least one-third of the minimum number of credit hours required for a Minor must be completed at this University.
2. No more than 9 of the 18 combined credit hours required to fulfill the Critical Reading and Writing (CRW), Language Study (LS), and Quantitative Reasoning (QR) Requirements may be transferred as equivalencies from another institution. In addition, no more than 3 credit

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hours in a CRW course may be transferred towards the [Critical Reading and Writing](#) requirement, with the exception of pre-authorized courses from the College of the North Atlantic that follow this University's CRW guidelines. Additional transferred credit hours that would normally qualify towards these requirements may be eligible to fulfill other requirements of the degree."

51.9 Department of Archaeology

Page 339, 2018-2019 Calendar, under the heading 15.2 Archaeology, amend the section as follows:

**~~"3290 First Peoples of Newfoundland and Labrador is a seminar and reading course on~~ explores the culture archaeological history of the area which today includes Newfoundland and Labrador and eastern Québec, from about 9,000 years ago entry of humans into the region until the time of European settlement contact, including the ancestors of the Beothuk, Mi'kmaq, Innu, and Inuit. Particular attention ~~will be~~ is paid to the interactions among the ~~several ethnic and cultural groups upon whose history this course focuses.~~ various archaeological cultures in the region and their adaptations to the local environment.**

PR: ARCH 1000 or the former 1030 or permission of the instructor

**3291 First Peoples of the Maritime Provinces** explores cultural developments in the area which today includes the Maritime Provinces and northern Maine, from the entry of humans into the region until the time of European contact, including the ancestors of the Mi'kmaq, Wolastoqiyik, and Peskotomokhadi. Emphasis is placed on cultural adaptations to a changing regional environment and the evidence for intercultural contact.

PR: ARCH 1000 or the former 1030 or permission of the instructor

**3520 Aboriginal History to 1763** (same as History 3520, Anthropology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.

CR: History 3520, Anthropology 3520

~~UL: not applicable towards the Major or Minor in Anthropology~~

**3525 Aboriginal History from 1763** (same as History 3525 and the former Anthropology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi'kmaq, from 1763 to the twentieth century. Particular attention will be paid to

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Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.

CR: History 3525, ~~the former~~ Anthropology 3525

UL: ~~not applicable towards the Major or Minor in Anthropology~~

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**“3520 Aboriginal History to 1763** (same as Archaeology 3520 and Anthropology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.

CR: Archaeology 3520, Anthropology 3520

UL: ~~not applicable towards the Major or Minor in Anthropology~~

**3525 Aboriginal History From 1763** (same as Archaeology 3525 and ~~the former~~ Anthropology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.

CR: Archaeology 3525, ~~the former~~ Anthropology 3525

UL: ~~not applicable towards the Major or Minor in Anthropology~~

Page 201, 2018-2019 Calendar, under the heading 13.1 Anthropology, amend the section as follows:

**“3520 Aboriginal History to 1763** (same as Archaeology 3520 and History 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.

CR: Archaeology 3520 and History 3520

**3525 Aboriginal History from 1763** (same as Archaeology 3525 and History 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and

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diplomacy, expansion and removals, education, treaties, and politicization.

CR: Archaeology 3525 and History 3525”

Page 215, 2018-2019 Calendar, under the heading 13.18 History, amend the section as follows:

**“3520 Aboriginal History to 1763** (same as Anthropology 3520 and Archaeology 3520) examines Aboriginal history in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from before European contact to the Royal Proclamation in 1763. Particular attention will be paid to historical encounters framed by first contacts, cultural exchange, trade, disease, religious encounters, conflict and diplomacy, and territorial encroachment.

CR: Anthropology 3520 and Archaeology 3520

~~UL: not applicable towards the Major or Minor in Anthropology~~

**3525 Aboriginal History from 1763** (same as Anthropology 3525 and Archaeology 3525) examines the history of Aboriginal peoples in North America, including the Innu, Inuit, Beothuk and Mi’kmaq, from 1763 to the twentieth century. Particular attention will be paid to Indigenous-settler relations, including Aboriginal policies, military encounters and diplomacy, expansion and removals, education, treaties, and politicization.

CR: Anthropology 3525 and Archaeology 3525

~~UL: not applicable towards the Major or Minor in Anthropology”~~

Page 339, 2018-2019 Calendar, under the heading 15.2 Archaeology, amend the section as follows:

**“2480 Principles of Archaeology** is an introduction to archaeological techniques, methodology and theory. Classes cover the development of the discipline, techniques of survey and excavation, and the main methods of archaeological analysis and interpretation.

OR: May be offered in an accelerated format outside the regular semester or session timeframe

PR: ARCH 1000 or the former 1030 or permission of the instructor

**2583 Introduction to Applied Archaeology** (same as the former ARCH 3583) is designed to familiarize students with field and laboratory techniques. Students will learn about research design and the methodologies involved in archaeological site survey and excavation. Students will be instructed in the identification of archaeological sites, completion of site inventory forms, the use of surveying instruments, and the creation of accurate site maps, using these instruments as well as the concepts associated with archaeological excavation, mapping, recording and photography. Moreover, students will be given basic instruction in

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artifact identification, processing and cataloguing. This course is intended to be a precursor to ARCH 3585 and 3586.

CR: the former ARCH 3583

OR: May be offered in an accelerated format outside the regular semester or session timeframe

PR: ARCH 2480”

51.10 Department of English

Page 347, 2018-2019 Calendar, under the heading 15.6 English, amend the section as follows:

~~“**2850 What is Film?** is designed to introduces students to the medium critical analysis of film. It is aimed at marking a shift from the natural enjoyment of movies to a critical understanding and to modes of film practice. Focus will be on the elements of film as components of cinematic style and meaning and on various approaches to the study of film., focusing on how its elements create style and meaning.~~

~~**2851 Introduction to Film Form and Film Theory** is concerned with developing develops students’ visual literacy skills, and introduces film theories focused on, for example, critically engage with film. Special attention is paid to film form, historical/social contexts for the production and reception of visual images, and the roles that progressive reproduction technologies, and cultures of spectatorship, and seeing play in understanding our contemporary world through and beyond visual culture.”~~

Page 270, 2018-2019 Calendar, under the heading 7.5.4 Declaring the Diploma in Creative Writing, amend the section as follows:

**“7.5.4 Declaring the Diploma in Creative Writing**

Students wishing to declare a Diploma in Creative Writing ~~shall~~ are encouraged to consult with the Program Coordinator to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at [www.mun.ca/hss/programs/undergraduate/ideclare.php](http://www.mun.ca/hss/programs/undergraduate/ideclare.php).”

Page 270, 2018-2019 Calendar, under the heading 7.5.3 Admission Requirements, amend the section as follows:

**“7.5.3 Admission Requirements**

Students will be admitted to individual creative writing courses (excepting the introductory course, English 2905) based on writing portfolios they submit to the course instructor ~~via the writing portfolio~~

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~~system~~. Students interested in taking a creative writing course should contact the Program Coordinator or course instructor a minimum of one month prior to the start of the semester to discuss portfolio requirements (usually five to ten pages of the student's best writing in the appropriate genre). A student will be notified as to their admission status in a creative writing course after the instructor has reviewed the submitted writing portfolio."

Page 352, 2018-2019 Calendar, under the heading 15.6.1 Communication Studies, amend the section as follows:

**"3001 Media and Urban Life explores the theoretical, representational, and experiential intersections between modern media and urban cultures. The course will foreground how recent media theory has been shaped by important theoretical works in the study of urban societies.  
**Abbreviated Course Title:** Media and Urban Life"**

Page 304, 2018-2019 Calendar, under the heading 14.6.5.4 Course List, amend Table 1 as follows:

**Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major in Communication Studies**

<b>1000 and 2000 Level Courses</b>	<b>3000 Level Courses</b>	<b>4000 Level Courses</b>
<ul style="list-style-type: none"> <li>• CMST 2000, 2001</li> <li>• CMST 2813 or English 2813</li> <li>• Linguistics 1100</li> <li>• Philosophy 2140 or the former 2582</li> <li>• Philosophy 2360 or the former 3620</li> <li>• Religious Studies 2812</li> <li>• Sociology 2210</li> </ul>	<ul style="list-style-type: none"> <li>• Anthropology 3630 or Sociology 3630</li> <li>• CMST 3000</li> <li>• <u>CMST 3001</u></li> <li>• CMST 3010-3020</li> <li>• CMST 3816 or the former English 3816</li> <li>• CMST 3913 or English 3913</li> <li>• English 3843, 3912</li> <li>• Folklore 3612, 3930</li> <li>• Political Science 3350, 3860</li> </ul>	<ul style="list-style-type: none"> <li>• CMST 4000</li> <li>• CMST 4001</li> <li>• CMST 4010-4020</li> <li>• CMST 4402 or the former English 4402</li> <li>• Sociology 4107</li> </ul>

Page 352, 2018-2019 Calendar, under the heading 15.6.1 Communication Studies, amend the section as follows:

**"4002 Media and the Environment explores the representational, technological, industrial, and socio-political dynamics associated with ecocritical media studies.  
**Abbreviated Course Title:** Media and the Environment"**

Department of English (cont'd)

Page 304, 2018-2019 Calendar, under the heading 14.6.5.4 Course List, amend Table 1 as follows:

**Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major and Minor in Communication Studies**

1000 and 2000 Level Courses	3000 Level Courses	4000 Level Courses
CMST 2000, 2001 CMST 2813 or English 2813 Linguistics 1100 Philosophy 2140 or the former 2582 Philosophy 2360 or the former 3620 Religious Studies 2812 Sociology 2210	Anthropology 3630 or Sociology 3630 CMST 3000, <u>3001</u> CMST 3010-3020 CMST 3816 or the former English 3816 CMST 3913 or English 3913 English 3843, 3912 Folklore 3612, 3930 Political Science 3350, 3860	CMST 4000 CMST 4001 <u>CMST 4002</u> CMST 4010-4020 CMST 4402 or the former English 4402 Sociology 4107

Page 271, 2018-2019 Calendar, under the heading 7.6.3 Regulations for the Diploma in Environmental Humanities, amend Table 1 as follows:

**Table 1 Approved Courses for the Diploma in Environmental Humanities**

Required Courses	Other Approved Courses
Geography 1050 At least one of Geography 4500 or History 4500, History 4125, Sociology 4104	Anthropology 3050, 3083, 3280, 3452, 4450 Classics 2902 <u>CMST 4002</u> Geography 2001, 2425, 3610 History 3030, 4011, 4125, 4220, 4252 Philosophy 2130 or the former 2561 Religion 3880 Russian 3440 Sociology 2290

Page 347, 2018-2019 Calendar, under the heading 15.6 English, amend the section as follows:

**“3009 Literature and the Environment** examines literary writing concerned with relationships between humans and the nonhuman world. Possible topics include human-animal relationships; Indigenous relationships to the land; social justice and environment; traditions of environmental writing in different time periods, locations, and genres; writing ecological catastrophe; imagining the Anthropocene.  
PR: 6 credit hours in Critical Reading and Writing courses  
**Abbreviated Course Title:** Literature and Environment”

Page 271, 2018-2019 Calendar, under the heading 7.6.3 Regulations for the Diploma in Environmental Humanities, amend Table 1 as follows:



Department of English (cont'd)

**Table 1 Approved Courses for the Diploma in Environmental Humanities**

Required Courses	Other Approved Courses
<ul style="list-style-type: none"> <li>o Geography 1050</li> <li>o At least one of Geography 4500 or History 4500, History 4125, Sociology 4104</li> </ul>	<ul style="list-style-type: none"> <li>o Anthropology 3050, 3083, 3280, 3452, 4450</li> <li>o Classics 2902</li> <li>o <u>English 3009</u></li> <li>o Geography 2001, 2425, 3610</li> <li>o History 3030, 4011, 4125, 4220, 4252</li> <li>o Philosophy 2130 or the former 2561</li> <li>o Religion 3880</li> <li>o Russian 3440</li> <li>o Sociology 2290</li> </ul>

51.11 Department of Geography

Page 308, 2018-2019 Calendar, under the heading 14.10.3 Major in Geography (B.A. or B.Sc.), amend the section as follows:

**“14.10.3 Major in Geography (B.A. or B.Sc.)**

1. Students may complete a Major in Geography as part of either a B.A. or B.Sc. program. See the **Regulations for the General Degree of Bachelor of Arts** and **Degree Regulations** for the General Degree of Bachelor of Science as appropriate.
2. All students who major in Geography shall consult with their assigned faculty advisor, or the Head of the Department, who will help them in planning their academic program. For this purpose, it is essential that students declare their major at an early stage of their studies.
3. The Major in Geography consists of 45 credit hours in Geography courses including:
  - a. 1050, ~~or the former 1000 & 1001, or 1010 & 1011;~~
  - b. 2001, 2102, 2195, ~~2226~~, 2302, 2425;
  - c. 3222, ~~3226~~;
  - d. 3228, or the former 2226 and 3226;
  - e. 9 additional credit hours from courses at the 3000-level;
  - f. 490A & 490B;
  - g. at least ~~9~~ 6 additional credit hours chosen from courses at the 4000-level; and
  - h. further credit hours in courses at the 3000-level or above, to fulfil the required 45 credit hours in Geography courses.
4. B.Sc. students must complete 15 credit hours in science courses outside Geography at the 2000-level or above.”

Page 308, 2018-2019 Calendar, under the heading 14.10.4 Honours in Geography (B.A. or B.Sc.), amend the section as follows:

Department of Geography (cont'd)

**“14.10.4 Honours in Geography (B.A. or B.Sc.)**

1. Students intending to take an Honours degree in Geography must apply for entry to the Honours program through the Office of the Registrar.
2. Students accepted in the Honours program must:
  - a. comply with the **Regulations for the Honours Degree of Bachelor of Arts** or **Degree Regulations** for the Honours Degree of Bachelor of Science as appropriate; and
  - b. arrange their program in consultation with the Head of the Department.
3. For the Honours Degree, a student will be required to have completed at least 60 credit hours in courses in Geography, including:
  - a. 45 credit hours in courses as listed under Major in Geography;
  - b. Geography 3230, ~~4990~~ **490A, 490B**, and 4999; and
  - c. 6 additional credit hours at the 4000-level.”

Page 309, 2018-2019 Calendar, under the heading 14.10.6.1 Bachelor of Arts, amend the section as follows:

**“14.10.6.1 Bachelor of Arts**

As an alternative to a minor in the B.A., a student may choose to complete a major in Geography and a major in another eligible program in the Faculty of Humanities and Social Sciences. The Joint Major Program requires 3 fewer credit hours in each participating major as prescribed in each program's Calendar entry. The joint major in Geography requires completion of Geography 1050, 2001, 2102, 2195, 2302, 2425, 3222, Geography 3226, 490A, 490B, 9 additional credit hours at the 3000-level, and 9 additional credit hours at the 4000-level.”

Page 359, 2018-2019 Calendar, under the heading 15.11 Geography, amend the section as follows:

~~“2226 Field Methods I is designed to introduce students to the practice of geography in the field. Field techniques will focus on the observation, identification, and collection of primary data. This course provides a basis for further study in advanced geography courses.~~

~~CH: 1~~

~~PR: GEOG 1050 or permission of the instructor~~

**~~3226 Field Methods II~~**

~~is designed to provide students with field experience at a more advanced level, building on GEOG 2226. In this course, the students will experience the field research process from the initial observation of a site through research and analysis to completion of a written report.~~

Department of Geography (cont'd)

CH: 2

PR: GEOG-2226

**3228 Field Methods in Geography** is designed to introduce students to the practice of geography in the field. Throughout this course, the students will experience the field research process from the initial observation of a site, formation of research questions and methods, collection of primary data, research and analysis, and finally presentation of their findings to both academic and public audiences via reports, outreach activities, or presentations.

LH: 3

PR: GEOG 1050 and one course at the 2000- level in Geography.

**Abbreviated Course Title:** Field Methods in Geography

**490A Geography in Action I** is the first half of a two semester linked course, built around geography-related issues that integrate natural and social science perspectives. Each year, students will address specific challenges faced by a client, NGO, or research group in the province. Through this process, students will reflect on the conceptual and practical challenges faced by practicing geographers.

CH: 1

PR: GEOG 3222; GEOG 3228 or the former 3226

CR: the former GEOG 4990

**Abbreviated Course Title:** Geography in Action I

**490B Geography in Action II** is the second half of a two semester linked course, built around geography-related issues that integrate natural and social science perspectives. Each year, students will address specific challenges faced by a client, NGO, or research group in the province. Through this process, students will reflect on the conceptual and practical challenges faced by practicing geographers.

CH: 2

PR: GEOG 490A

CR: the former GEOG 4990

**Abbreviated Course Title:** Geography in Action II

**4030 Discard Studies** covers the cultural, economic, and resource aspects of waste, pollution, and externalities. Topics include, but are not limited to: social justice, colonialism, toxicity, scale, spatialities and temporalities, economic development, and infrastructures as they relate to systems of waste. Both quantitative and qualitative methods are emphasized.

**Abbreviated Course Title:** Discard Studies

**4040 Assessing Environmental Change** provides a survey of common environmental monitoring and analysis techniques, and applies them to

Department of Geography (cont'd)

the study of a particular location. Students will gain practical experience with environmental sampling techniques and analytical methods targeted at identifying adverse impacts of i) human activity on the natural environment and ii) nature on the built environment.

LH: 3

PR: GEOG 3222 and one of GEOG 3120, 3140, 3250, or 3260.

**Abbreviated Course Title:** Assessing Env Change

**4050 Engaging Arctic and Northern Geographies** explores the geography of global Arctic and Northern Regions from an integrative geographical perspective. Students integrate and apply concepts, themes, and methodologies developed over the Geography program in a hands-on, northern-focused research project. By focusing on a specific "hot topic" theme, students will also have the opportunity to examine the interactions and interdependencies between the human and the physical dimensions of northern geography across a variety of scales.

PR: GEOG 2001, GEOG 2102, and at least 6 credit hours of Geography courses at the 3000 level or above.

CR: the former GEOG 3905

**Abbreviated Course Title:** Arctic North Geog

**4060 Natural Hazards: People and Environments** considers case studies involving select biological and medical; climatological; geophysical; hydrological; and meteorological hazards. There are no hazards without people. The emphasis is not only in how and where particular natural hazards develop, from a physical / exposure viewpoint, but also in the implications for risk management, emergency response, planning, and community sustainability. Aspects of social and community sensitivity and vulnerability will be emphasized.

CR: the former GEOG 4908

**Abbreviated Course Title:** Natural Hazards: People & Envs

**4700 Seminar in Advanced Urban Geography Adaptive Cities and Communities** will provide ~~senior~~ students with the opportunity to immerse themselves in the analysis of a small number of problems related to contemporary urban ~~structure and growth~~ studies and community planning. Topics include but are not limited to: adaptable economies, socio-cultural change, northern cities, governance, climate change, and the built environment.

PR: GEOG 3701, or 3350. It is strongly recommended that GEOG 3222 and 3226 be completed before registration in 4000-level courses.

**Abbreviated Course Title:** Adaptive Cities & Communities

**4990 Nature of Geography** is an examination of the major philosophical issues in the nature of geography and recent changes in geographical method. Particular emphasis will be placed on the implications of the quantitative, systems, behavioural and ecological approaches in

Department of Geography (cont'd)

~~geography, the use of models, the place of theory and the study of process in geography.~~

~~PR: It is strongly recommended that GEOG 3222 and 3226 be completed before registration in 4000 level courses. Admission to the Honours program."~~

51.12 Department of History

Page 309, 2018-2019 Calendar, under the heading 14.11.1 Department of History Description, amend the section as follows:

**"14.11.1 Department of History Description**

History is the study of past societies through the critical examination of available evidence including texts, words and objects. The Department of History offers students the opportunity to study both the distant and recent past by exploring a variety of different topics and themes. The analytical skills integral to studying history - essentially how people interacted with one another and their built and natural environments - provide students with opportunities to develop critical thinking and writing proficiencies in addition to an appreciation of past cultures and societies.

History course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under **Course Descriptions, History** and are designated by HIST.

The following programs are offered in the Department of History:

- 1. Major in History**
- 2. Minor in History**
- 3. Joint Major in History**
- 4. ~~Specialization in Maritime History~~**
- 5. 4. Honours in History"**

Page 310, 2018-2019 Calendar, under the heading 14.11.3.4 Specialization in Maritime History, amend the section as follows:

**"14.11.3.4 Specialization in Maritime History**

~~The Department of History offers a specialization in Maritime History. Recommended courses include History 2100, History 2110, History 3680, History 3690, and 6 credit hours from History 4670-4690."~~

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**~~"2110 - North Atlantic History Since 1820 - inactive course."~~**

Department of History (cont'd)

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**“4568 Holocaust in Historical Perspective** examines the origins of the Holocaust: the state-sponsored, systematic persecution and murder of approximately 6 million European Jews by Nazi Germany and its collaborators between 1933 and 1945. The Nazis persecuted millions more because of their religion, nationality, political views, mental or physical impairment, or sexual orientation. The course explains the historical, social, religious, political and economic factors that cumulatively resulted in the Holocaust.

**Abbreviated Course Title:** Holocaust in Hist Perspective

**4560-4570 (Excluding 4568, 4569, 4570) Special Topics in Social and Intellectual History** are specialized studies in Social and Intellectual history. Aspects to be studied will be posted on the Department of History website.”

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**“4313 From Rune Stones to Roxette: the History of the Nordic Countries** examines the history of the Nordic countries from the time of the Vikings to the late 20<sup>th</sup> century but focuses primarily on the early modern period onwards. Students will examine not only the various forces that influenced events and trends in the Nordic countries, but also the impact that this 'peripheral' area of Europe had on other parts of the world while also maintaining its own identity.

**Abbreviated Course Title:** History Nordic Countries

**4310-4330 (Excluding 4313 and 4330) Special Topics in European History** are specialized studies in the history of Europe. Aspects to be studied will be posted on the Department of History website.”

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**“3819 A History of Central Europe: the Czech Republic, Slovakia, Poland, and Hungary** follows the development of the Czech and Slovak Republics, Hungary, and Poland out of the Austro-Hungarian, German and Russian empires after World War I. Subjects will include internal matters and international relations from the early twentieth century into the post-World War II period. Special emphasis will be given to the events leading up to the crises created by the end of the Soviet Union and the emergence of new Russia.

**Abbreviated Course Title:** A History of Central Europe

Department of History (cont'd)

**3800-3830 (Excluding 3801, 3806, 3807, 3811, 3813, 3819, 3821, 3822 and 3826) Contemporary Problems in Historical Perspective** is an analysis of developments leading to a contemporary issue or problem selected each year or semester. Aspects to be studied will be posted on the Department of History website.

CR: credit may be obtained for only one of HIST 3016 and HIST 3803”

51.13 Department of Linguistics

Page 311, 2018-2019 Calendar, under the heading Major in Linguistics, amend the section as follows:

**“14.12.3 Major in Linguistics**

The General Major in Linguistics requires twelve courses, 36 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in **Table 1 Suggested Course Sequence for Major in Linguistics** in order to proceed smoothly in the program.

1. Students majoring in Linguistics must complete 36 credit hours in Linguistics, which must include either Linguistics 1100 or 1155 and the 12 credit hours 1103, 1104, 3100, 3201 plus 21 credit hours in courses chosen from Linguistics 1105, 2060, 2210, 2212, 2220, 2300, 3000, 3104, 3105, 3150, 3155, 3210, 3302, 3310, 3311, 3500, 3850, 3950-3960, 4010-4091, 4100, 4110, 4150, 4151, ~~4204~~ 4203, ~~4202~~ 4204, 4210, 4400, 4420, 4421, 4500, 4700, 4750, 4751, 4752, 4753, 4754, 4900, 4901, 4950-4960. Of these 21 credit hours, 9 must be at the 4000 level.”

Page 312, 2018-2019 Calendar, under the heading 14.12.4 Minor in Linguistics, amend the section as follows:

**“14.12.4 Minor in Linguistics**

The General Minor in Linguistics requires eight courses, 24 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in **Table 2 Suggested Course Sequence for Minor in Linguistics** in order to proceed smoothly in the program.

1. Students minoring in Linguistics must complete 24 credit hours in Linguistics, which must include: either Linguistics 1100 or 1155, and both of 1103 and 1104; any 6 credit hours from the following list: Linguistics 3000, 3100, 3104, 3201, 3500, 3850; and an additional 9 credit hours selected from: Linguistics 1105, 2060, 2210, 2212, 2220, 2300, 3000, 3100, 3104, 3105, 3150, 3155, 3201, 3210, 3302, 3310, 3311, 3500, 3850, 3950-3960, 4010-4091, 4100, 4110, 4150, 4151, ~~4204~~ 4203, ~~4202~~ 4204, 4210, 4400, 4420, 4421, 4500, 4700, 4750, 4751, 4752, 4753, 4754, 4900, 4901, 4950-4960.”

Department of Linguistics (cont'd)

Page 312, 2018-2019 Calendar, under the heading 14.12.5 Honours in Linguistics, amend the section as follows:

**“14.12.5 Honours in Linguistics**

The Honours in Linguistics requires twenty courses, 60 credit hours and the joint Honours requires sixteen courses, 48 credit hours. When planning the program of study, a student is encouraged to follow the pattern outlined in **Table 3 Suggested Course Sequence for Honours in Linguistics** in order to proceed smoothly in the program.

1. In addition to meeting the requirements below students must also meet the Faculty of Humanities and Social Sciences Honours regulations outlined under [Bachelor of Arts \(Honours\) Degree Regulations](#).
2. An Honours degree in Linguistics must include 60 credit hours in Linguistics courses, including at least 36 credit hours at the 3000-level or above, of which the following are required: either Linguistics 1100 or 1155, and 1103, 1104, 2210, 3000, 3100, 3201, 3210, 3500, 3850, 4100 (or 4110), ~~4201~~ 4203 (or ~~4202~~ 4204), 4999, and at least one of Linguistics 4010-4091, 4150, 4151, 4210, 4500, 4700, 4750, 4751, 4752, 4753, 4754, 4900-4901, 4950-4960. Students should choose courses in consultation with their Honours Essay supervisor, to ensure that the needs and interests of the individual student are met, and to take into account the availability of courses which the Department is able to offer.

**Table 3 Suggested Course Sequence for Honours in Linguistics**

Year	Required Courses	Recommended Courses
1	Linguistics 1100 or 1155, and 1103, 1104, 2210	one other 2000-level LING course
2	LING 3000, 3100, 3201, 3210, 3850	LING 3155 one other 2000 or 3000-level LING course
3	LING 3500, 4100 (or 4110), <del>4201</del> <u>4203</u> (or <del>4202</del> <u>4204</u> ) one of 4010-4091, 4150, 4210, 4500, 4700, 4950-4960	two other 3000 or 4000-level LING courses
4	LING 4999	one other 4000-level LING course

With the exception of LING 1100 all other Linguistics courses are offered, other than language.”

Page 369, 2018-2019 Calendar, under the heading 15.22 Linguistics, amend the section as follows:



Department of Linguistics (cont'd)

**“3104 Phonetics** provides a thorough grounding in pronouncing, transcribing and acoustically analyzing the sounds of the world's languages. Material covered includes study of the vocal anatomy, phonetic transcription of speech data from both English and a variety of the world's languages, as well as basic concepts of acoustic analysis and speech perception. This involves the close examination of data from many of the world's languages, which illustrates how widely languages can differ in their selection and organization of speech sounds.

PR: LING 1100 or 1155, or waiver in special cases by the Head of the Department

**3155 Introduction to Language Acquisition** examines critical issues in language acquisition, in light of the most central theoretical perspectives in this area of research. The course combines experimental evidence from infant speech perception with corpus data documenting speech production abilities in first language learners. Issues in second language acquisition and developmental language disorders are also discussed whenever relevant, and as part of dedicated lectures. Data from different populations of learners and across many different languages serve to illustrate the discussion, whenever relevant.

PR: LING 1100 or 1155, or the former LING 2100 or waiver in special cases by the Head of the Department

**3210 Introduction to Sociolinguistics** introduces the methods and theory underlying current approaches to the relationship between language and society. Topics covered include the concept of variation within language, both regional and social; the linguistic and social causes of such variation; and the means by which societies shape linguistic choices and behaviour.

PR: LING 1100 or 1155, or the former LING 2100 or LING 2210 or waiver in special cases by the Head of the Department

**3951 Language Endangerment and Revitalization** provides an introduction to the key issues surrounding the discussion of endangered languages. Causes, consequences, and efforts to reverse the process of decline (language revitalization or maintenance) are examined through consideration of case studies from around the world. Theoretical models developed to evaluate the current status and future prospects of endangered languages are also considered. The course is likely to include substantial discussion of the situation in Canada and the USA.

PR: LING 1100 or 1155, or the former LING 2100 or waiver in special cases by the Head of the Department

**4201 4203 (same as the former 4201) Advanced Phonology** addresses current issues in phonological theory. Topics include phonology in the lexicon, segmental and prosodic representations, as well as advanced issues in constraint-based approaches to phonology. Students further

Department of Linguistics (cont'd)

develop their ability to analyze phonological data in light of current theories.

PR: LING 3201 or waiver in special cases by the Head of the Department

CR: the former LING 4201

**4202 4204 (same as the former 4202) Selected Topics in Generative Phonology** - inactive course.

CR: the former LING 4202

**4301 French Dialects, Patois and Argots**—inactive course.

**4310 The French Language in Canada**—inactive course.

**4350 General Romance Linguistics**—inactive course.

**4400 Historical and Comparative Linguistics**—inactive course.

**4403 Etymology: History of English Words**—inactive course.

**4956 Language Disorders and Linguistic Theory** provides an overview of some of the most frequently studied language-related disorders. This course will focus on the nature of language disorders and how linguistic theory (especially, generative syntax) can account for language behavior in affected individuals. Lectures and assignments will give students the opportunity to examine the clinical aspects of disorders that impact oral language, including specific language impairment, autism spectrum disorder, and aphasia, and to apply syntactic theory to various sets of language data.

PR: LING 3100 and 3155 or permission of instructor”

51.14 Department of Modern Languages, Literatures and Culture

Page 387, 2018-2019 Calendar, under the heading 15.30 Spanish, amend the section as follows:

~~“**1000 Elementary Spanish** I is an introductory course, grammar, reading and oral Spanish. All sections of this course follow the Language Study Course Guidelines available at [www.mun.ca/hss/ls](http://www.mun.ca/hss/ls).~~

~~OR: students may be required to attend a 50-minute weekly practicum~~

**1000 Introductory Spanish I** is a course without prerequisites for students with no prior knowledge of the language. The fundamentals of Spanish are introduced through communicative and task-based activities that develop understanding, speaking, reading, and writing. Aspects of Spanish culture are also presented. Group or individual practice in the language laboratory and conversation classes are also part of this course.

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All sections of this course follow the Language Study Course Guidelines available at [www.mun.ca/hss/lc](http://www.mun.ca/hss/lc).

OR: Students may be required to attend a 50- minute weekly practicum

**Abbreviated Course Title:** Introductory Spanish I

~~**1001 Elementary Spanish II** is a continuation of Elementary Spanish I. All sections of this course follow the Language Study Course Guidelines available at [www.mun.ca/hss/lc](http://www.mun.ca/hss/lc).~~

~~OR: students may be required to attend a 50-minute weekly practicum~~

~~PR: SPAN 1000~~

**1001 Introductory Spanish II** is a continuation of Spanish 1000 with practice in the four language skills: understanding, speaking, reading, and writing, and further exploration of Spanish culture through interactive classroom instruction and more laboratory and conversation practice.

PR: SPAN 1000 or permission from the Head of the Department

**Abbreviated Course Title:** Introductory Spanish II”

Page 314, 2018-2019 Calendar, under the heading 14.14.2.2 French Major Program, amend the section as follows:

**“14.14.2.2 French Major Program**

Students completing a French Major Program, depending on the student's program and point of entry into the program, may wish to follow Table 1 Course Pattern for Major in French, On-Campus (Entry Point FREN 1500), Table 2 Course Pattern for Major in French, On-Campus (Entry Point FREN 2100, or Table 3 Course Pattern for Major in French, Study-Away Option below.

1. Students who choose French as their Major must complete at least 42 credit hours in French, including:
  - a. No more than 6 credit hours at the 1000 level (but see (4) below);
  - b. 2100 and 2101;
  - c. 2300;
  - d. At least 6 credit hours chosen from 2601, 2602 and 2900;
  - e. 3100 and 3101;
  - f. At least 6 credit hours chosen from 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508;
  - g. At least 6 credit hours at the 4000 level; and
  - h. An extra 3 credit hours at the 2000 level or above.
2. Between their first registration at Memorial University of Newfoundland and the time of their graduation, all students majoring in French must have spent at least eight weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment. Students are strongly encouraged to fulfill the requirement early in their

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program in order to get the greatest benefit from the immersion experience. Students should consult the Head of the Department before the end of their second year of study (60 credit hours) for help in selecting the immersion experience most appropriate for their circumstances. Every reasonable effort will be made by the Department to accommodate students who, for personal or professional reasons, need to fulfill the immersion requirement in a different setting. Please note that accommodation cannot include waivers or exemptions from the immersion requirement as completion of the immersion requirement is an academic requirement for all students completing a Major in French. Students with extenuating circumstances should consult with the Head of the Department for alternative options.

3. No more than 12 transfer credit hours may be used to fulfill the minimum requirements of the Major in French as outlined under Transfer Credit for Language Courses.
4. It is strongly recommended that students in the Major program complete Classics 1120. This course may be substituted for 3 credit hours in French beyond the first-year level.

Page 317, 2018-2019 Calendar, under the heading 14.14.2.4 Honours Degree in French, amend the section as follows:

**“14.14.2.4 Honours Degree in French**

In addition to the following regulations students are advised to see the General Regulations for Honours Degrees.

1. An Honours degree in French shall consist of at least 60 credit hours in French, including:
  - a. no more than 6 credit hours at the 1000 level (but see (4) below);
  - b. 2100 and 2101;
  - c. 2300;
  - d. at least 6 credit hours chosen from 2601, 2602 and 2900;
  - e. 3100 and 3101;
  - f. at least 6 credit hours chosen from 3500, 3501, 3502, 3503, 3504, 3506, 3507, 3508;
  - g. a minimum of 15 credit hours at the 4000 level including French 4900 and 4999; and
  - h. an extra 6 credit hours at the 2000 level or above.
2. Between their first registration at Memorial University of Newfoundland and the time of their graduation, all students completing the Honours program in French must have spent at least two semesters at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment. Students are strongly encouraged to fulfill the requirement early in their program in order to get the

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greatest benefit from the immersion experience. Students should consult the Head of the Department before the end of their second year of study (60 credit hours) for help in selecting the immersion experience most appropriate for their circumstances. Every reasonable effort will be made by the Department to accommodate students who, for personal or professional reasons, need to fulfill the immersion requirement in a different setting. Please note that accommodation cannot include waivers or exemptions from the immersion requirement as completion of the immersion requirement is an academic requirement for all students completing an Honours Degree in French. Students with extenuating circumstances should consult with the Head of the Department for alternative options.

3. No more than 24 transfer credit hours may be used to fulfill the minimum requirements of the Honours program in French as outlined under Transfer Credit for Language Courses.
4. Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.”

Page 323, 2018-2019 Calendar, under the heading 14.14.5.2 Spanish Major Program, amend the section as follows:

**“14.14.5.2 Spanish Major Program**

1. A Major in Spanish consists of a minimum of 36 credit hours in Spanish ~~chosen from the courses listed under the Spanish Course Descriptions~~. It is strongly recommended that students in the Spanish Major Program complete Classics 1120 and 1121.
2. No more than 9 transfer credit hours may be used to fulfill the minimum requirements of the Major in Spanish.
3. Students who have spent an extended period of time studying Spanish in a Spanish-speaking milieu may discuss with the Head of the Department the suitability of seeking permission from the ~~Committee on Undergraduate Studies~~ Undergraduate Waivers and Appeals Committee, Faculty of Humanities and Social Sciences to transfer up to a maximum of 3 additional credit hours.”

Page 324, 2018-2019 Calendar, under the heading 14.14.5.3 Spanish Minor Program, amend the section as follows:

**“14.14.5.3 Spanish Minor Program**

1. A Minor in Spanish consists of a minimum of 24 credit hours in Spanish ~~from the courses listed under the Spanish Course Descriptions~~.
2. No more than 6 transfer credit hours may be used to fulfill the minimum requirements for a minor in Spanish. Students who have spent an extended period of time studying Spanish in a Spanish-speaking milieu may discuss with the Head of the Department the

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suitability of seeking permission from the Undergraduate Waivers and Appeals Committee, Faculty of Humanities and Social Sciences to transfer up to a maximum of 3 additional credit hours.”

Page 322, 2018-2019 Calendar, under the heading 14.14.3.4 German Minor Programs, amend the section as follows:

**“14.14.3.4 German Minor Programs**

2. German Studies Minor: In addition to the German Minor, a Minor in German Studies is also available consisting of a minimum of 24 credit hours in courses including:
  - a. GERM 1000, 1001, 2010, 2011, 2900 or 2901;
  - b. 9 credit hours taken in either additional courses in German and/or from cognate courses offered by other departments, such as History 3370, 3380, Philosophy 3230, 3231, 3310 (or the former Philosophy 3850, 3851, 3860) to be chosen through prior consultation with the German Program Liaison; ~~and~~
  - e. ~~not more than 3 credit hours in courses in the student's major program may be used to satisfy the requirements of the minor in German Studies.”~~

Page 318, 2018-2019 Calendar, under the heading 14.14.2.5 Joint Honours, amend the section as follows:

**“14.14.2.5 Joint Honours**

1. French may be combined with any other subject approved in the General Regulations to form a Joint Honours program. Students will establish their program in consultation with the Heads of the Departments of their chosen Honours subjects.
2. The Joint Honours program in French shall include at least 51 credit hours in French including the same requirements as the French Major.
3. Classics 1120 may be substituted for 3 credit hours in French beyond the first-year level.
4. By the time of their graduation, all students completing the Joint Honours program in French must have spent at least two semesters at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment.
5. No more than 18 transfer credit hours may be used to fulfil the minimum requirements of the Joint Honours program in French as outlined under Transfer Credit for French Language Courses.”

Page 318, 2018-2019 Calendar, amend the heading 14.14.2.6 Transfer Credit for Language Courses to read “Transfer Credit for French Language Courses”.

51.15 Department of Religious Studies

Page 379, 2018-2019 Calendar, under the heading 15.27 Religious Studies, amend the section as follows:

**“2900-2930 Intermediate Language Studies: Special Subjects** provide students with intermediate training in languages necessary for studying ancient religious texts. The languages presently offered through the Department are Mandarin Chinese, Biblical Hebrew, and Sanskrit. All sections of these courses follow the Language Study Course Guidelines available at [www.mun.ca/hss/lc](http://www.mun.ca/hss/lc).

CR: the former 4000 level language study courses (RELS 4902-4910 and 4311) in the corresponding language: Mandarin Chinese, Biblical Hebrew, or Sanskrit

PR: 6 credits at the first year level of study in the corresponding language: Mandarin Chinese (RELS 1040 and 1041), Biblical Hebrew (RELS 1050 and 1051), or Sanskrit (1060 and 1061).

~~**4902-4910 (Excluding 4904, 4905, 4906) Language Studies: Special Subjects** provide students with advanced training in languages necessary for studying ancient religious texts. The languages presently offered through the Department are Biblical Hebrew, Sanskrit, and Mandarin Chinese. In addition, courses in Latin and Greek are available from the Department of Classics. All sections of this course follow the Language Study Course Guidelines available at [www.mun.ca/hss/lc](http://www.mun.ca/hss/lc).”~~

Page 379, 2018-2019 Calendar, under the heading 15.27 Religious Studies, amend the section as follows:

~~**“2850 Religion and the Law: The Secular in Contemporary Canada** examines contemporary legal debates on secularism the place and contours of 'religion' in Canada. Taking a historical and sociological perspective, it considers how shifts in immigration policy have encouraged a diversity of contemporary religious practice. The course pays particular attention to religion and public policy (related to the *Multiculturalism Act*) and to changing definitions of accommodation and the Through consideration of a number of post-Charter Supreme Court of Canada decisions, as well as sociological research on different religious communities, we delve into the changing meanings of religious diversity in Canada.~~

**3811 Contemporary Alternative Spirituality** is an in-depth examination of one or more forms of contemporary alternative spirituality in historic and contemporary contexts. Students will study the writings of practitioners of alternative spirituality, as well as social-scientific studies of alternative spiritual groups. Religious movements to be explored include African American alternative spirituality, Mother Earth and Creation spirituality, Neo-paganism, the New Age Movement, UFO spirituality, and contemporary witchcraft. Spiritualism, and may

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also include Neo-paganism, the New Age Movement, and/or UFO spirituality as relevant.

**4812 Religion in Disney Parks** will introduce students to a variety of theoretical concepts, and provide students with the opportunity to apply these concepts in the field at Walt Disney World in Orlando, Florida or other Disney theme park. Concepts to be explored include civil religion, hyper-real religion, and religious consumerism; Disney's constructed pasts, futures and the global village will also be explored. AR: attendance is required in a field trip outside of Canada for which students incur the financial costs. Normally the field trip is held during the Winter semester break.

~~4998 Comprehensive Examination for Honours Students will be based on a program of assigned reading related to the general subject area of the student's dissertation.~~ prepares students to write a comprehensive examination at the end of the term, on a chosen area of specialization in Religious Studies. To complete the Honours Program in Religious Studies, students must successfully complete either the Honours Essay (RELS 4999) or the Comprehensive Examination.

PR: enrollment in the Honours program and 6 credit hours in Religious Studies courses at the 3000 level

~~4999 Honours Essay for Honours Students may be required as part of the honours program.~~ develops independent research and writing skills through regular meetings with a supervisor, the preparation of an approved research proposal, and the completion of the final Honours essay by the end of the semester. Prior to enrolling, ideally a semester in advance, students must contact the Head of the Department to identify a potential supervisor. To complete the Honours Program in Religious Studies, students must successfully complete either the Honours Essay or the Comprehensive Examination (RELS 4998).

PR: enrollment in the Honours program and permission of the Head of the Department"

51.16 Department of Sociology

Page 279, 2018-2019 Calendar, under the heading 8.7.4 Regulations for the Certificate in Criminology, amend the section as follows:

**"8.7.4 Regulations for the Certificate in Criminology**

The Certificate in Criminology consists of 21 credit hours as prescribed below. Six credit hours must be at the 3000-level or higher ~~and no more than 15 credit hours shall be in a single discipline:~~



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1. 12 credit hours, in Sociology 1000 or the former 2000; Sociology 2300 or Police Studies 2300; Sociology 3290; and Sociology 3395 or Police Studies 3395;
2. 3 credit hours in Law and Society 1000 and
3. 6 additional credit hours ~~at the 2000 level or above~~ chosen from **Table 1 Approved Courses for the Certificate in Criminology, of which 3 credit hours must be from Law and Society, Political Science, or Psychology.**

Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning.

Students are advised to generally follow the suggested course sequencing presented in **Table 2 Suggested Course Sequencing for the Certificate in Criminology.**

**Table 1 Elective Courses for the Certificate in Criminology**

<b>Core Courses</b>	<b>Other Approved Courses</b>
Law and Society 1000, 2000 Sociology 1000, 2300, 3290, 3395 <del>(Students who complete 3 credit hours in a research methods course in Psychology (2910, 2911, 2920, 2925 (Grenfell Campus only)) or Sociology (3040, 3041) shall, for the purposes of the Certificate, be deemed to have fulfilled 3 credit hours in Sociology 2300. The former Sociology 2000 may be used in lieu of Sociology 1000.)</del>	Police Studies 1000 or the former 2000, 2200, 3100 Political Science 3620, 3820 Psychology 2150, 2800, one of 3640 or 3650 <del>(For the purpose of the Certificate, a student completing Psychology 3626 at Grenfell Campus may substitute those credit hours for one of Psychology 3640 or 3650)</del> Sociology 3306 or <u>Police Studies 3306</u> , Sociology 4080, 4099, 4212 or <u>Police Studies 4212.</u>

**Table 2 Suggested Course Sequencing for the Certificate in Criminology**

First 6 credit hours: Law and Society 1000, Sociology 1000 Next 9 credit hours: Sociology 2300 <u>or Police Studies 2300</u> , <u>Sociology 3290</u> , <u>Sociology 3395 or Police Studies 3395</u> Final 6 credit hours: two additional approved courses, one <u>of which must be from Law and Society, Political Science or Psychology</u>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Eligible 4000-level credit hours may be substituted following the process outlined in General Regulations for Certificate Programs.”

Page 279, 2018-2019 Calendar, add a new section before 8.7.5 Course Prerequisites and renumber subsequent sections accordingly:

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**“8.7.5 Approved Course Substitutions for the Certificate in Criminology**

1. Psychology 3626 (Grenfell) may be substituted for Psychology 3640 or 3650.
2. Any one of Psychology 2910, 2911, 2920, or 2925 (Grenfell) or Sociology 3040 or 3041 may be substituted for Sociology 2300.

**8.7.56 Course Prerequisites**

Normal course prerequisites will apply. Students should note that Psychology 1000 and 1001 are prerequisites (in addition to the 21 credit hours specified for the certificate) for Psychology 2920. As well, as 6 credit hours in Sociology is the prerequisite for Sociology 4080, and Sociology 3040 and 3150 are prerequisites for Sociology 4099, enrollment priority will be given to students who have declared a Sociology Major and / or Criminology certificate.

**8.7.67 Regulations Concerning the Former Lifelong Learning Certificate in Criminology**

A Humanities and Social Sciences Certificate in Criminology cannot be awarded to those who have already been awarded a Certificate in Criminology through the former Division of Lifelong Learning.”

Page 275, 2018-2019 Calendar, under the heading 7.9.4 Program of Study, amend the section as follows:

**“7.9.4 Program of Study**

3. The Diploma in Police Studies consists of 30 credit hours chosen from Table 1 as follows:
  - a. 1824 credit hours in Police Studies 1000 (or the former PLST 2000), 2200, ~~2300 (or Sociology 2300)~~, 3000, 3100, 3500, and one of 4000, 4001, 4212 (or Sociology 4212);
  - b. 6 credit hours in two of Sociology 3290, Police Studies 3306 (or Sociology 3306), Police Studies 3395 (or Sociology 3395);  
and
  - c. 3 credit hours in Psychology 2150 or Archaeology 2492; and
  - d. 3 credit hours in Political Science 3620.

A student is expected to enroll in the Police Studies section of any applicable cross listed courses.

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**Table 1 Course Requirements for the Diploma in Police Studies**

<b>1000 and 2000-Level Courses</b>	<b>3000-Level Courses</b>	<b>4000-Level Courses</b>
Police Studies 1000 (or former PLST 2000) Police Studies 2200 Psychology 2150 or Archaeology 2492 <del>Police Studies 2300 or SOCI 2300</del>	Police Studies 3000 Police Studies 3100 Police Studies 3500 <u>Political Science 3620</u> Two of Sociology 3290, Police Studies 3306 or Sociology 3306 or Police Studies 3395 or Sociology 3395	One of Police Studies 4000, 4001, 4212 or Sociology 4212

51.17 Marine Institute

Page 45, 2018-2019 Calendar, under the heading 6.3 Residence Requirements, amend the section as follows:

**“6.3 Residence Requirements**

**6.3.1 General Information**

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

**6.3.2 First Degree**

1. For a first bachelor's degree students shall have completed a minimum of 24 credit hours through attendance at classes on the campus of a recognized university or university college. Distance education courses may be used to satisfy the requirements of this clause only for the degrees of Bachelor of Business Administration, Bachelor of Business Administration (Honours), Bachelor of Maritime Studies, Bachelor of Nursing (Post-RN) and Bachelor of Technology.
2. Students shall complete at this University the last 30 credit hours required for the degree. There are exceptions to this requirement as follows:
  - Where special circumstances warrant, and only if at least half the courses required for the degree are completed at this University, the appropriate committee on undergraduate studies may permit students to complete, at another recognized institution, not more than 15 of the last 30 credit hours or equivalent required for the degree. The courses which comprise those credit hours must be approved by the appropriate academic unit.

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- Courses taken at universities and/or colleges which are included in formal institutional exchange agreements with this University are not subject to the requirements of this clause.
  - Courses taken at Francophone universities, as required under specific degree program regulations, are not subject to the requirements of this clause.
3. Students who have taken courses in the subject of their major at another university are required to complete at least 12 credit hours in that subject at this University.

**6.3.3 Second Degree**

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

1. Every student for a second bachelor's degree, ~~with the exception of students completing the Bachelor of Technology or Bachelor of Maritime Studies degrees,~~ shall complete at least 30 credit hours at this University beyond those required for the first degree. These credit hours must be applicable to the degree sought. Students who have completed a first degree at this University may be permitted to take at another university up to 6 of the 30 credit hours required in this clause.

For the Bachelor of Maritime Studies, please see Regulation 6.1 Bachelor of Maritime Studies.

For the Bachelor of Technology, please see Regulation 6.2 Bachelor of Technology.

- ~~2. Students completing the Bachelor of Technology or Bachelor of Maritime Studies as a second degree must complete all required courses in their stream of study and the work completed as required for admission to the Bachelor of Technology/Bachelor of Maritime Studies degree. These credit hours must be applicable to the degree sought."~~

Page 149, 2018-2019 Calendar, under the heading 4 Description of Degree Programs, amend the section as follows:

**"4 Description of Degree Programs**

Students must meet all regulations of the ~~Fisheries and~~ Marine Institute in addition to those stated in the **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)**. For information concerning admission/readmission to the University and general academic regulations (undergraduate), refer to **UNIVERSITY REGULATIONS**.

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For information about non-degree programs and upgrading opportunities refer to [www.mi.mun.ca](http://www.mi.mun.ca).”

Page 150, 2018-2019 Calendar, under the heading 5 Admission/Readmission Regulations for Degree Programs, amend the section as follows:

### **“5 Admission/Readmission Regulations for Degree Programs**

In addition to meeting the admission/readmission requirements for the University students must also meet the admission/readmission requirements for the Marine Institute. See **UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate)** for University requirements.

#### **5.1 General Information**

1. The application for admission or readmission is submitted online; current and returning ~~Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ applicants should apply using the Admissions menu within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin). Applicants who are new to ~~the Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ should follow the application instructions at [www.mun.ca/undergrad/apply](http://www.mun.ca/undergrad/apply).

**Table 1 Application Deadlines**

Fall	June <del>15</del> <u>30</u> (Official transcripts due <del>June 30</del> <u>July 15</u> )
Winter	October 15 (Official transcripts due October 30)
Spring	March 15 (Official transcripts due March 30)

2. Students may not obtain both a Bachelor of Maritime Studies and a Bachelor of Technology degree based upon completion of the same diploma of technology.

#### **5.2 Admission Requirements for Applicants to the Bachelor of Maritime Studies Program**

1. The application for admission or readmission is submitted online; current and returning ~~Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ applicants should apply using the Admissions menu within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin). Applicants who are new to ~~the Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ should follow the application instructions at [www.mun.ca/undergrad/apply](http://www.mun.ca/undergrad/apply). This application must include all

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required documentation including proof of the diploma or certificate required for admission in a specific category.

2. **Categories for admission to the Bachelor of Maritime Studies**

Applicants must meet the general admission/readmission requirements of the University and be eligible for admission to the Bachelor of Maritime Studies program in one of the following categories:

1. Category A: applicants holding a diploma from the Marine Institute in nautical science, marine engineering technology, naval architecture technology or marine engineering systems design technology,
  2. Category B: applicants holding a Canadian Technology Accreditation Board accredited, or Transport Canada approved, diploma in marine engineering technology or nautical science,
  3. Category C: applicants holding a Canadian or non-Canadian diploma similar to an accredited or Transport Canada approved Marine Institute diploma in nautical science, marine engineering technology, naval architecture technology or marine engineering systems design technology,
  4. Category D: applicants holding a Transport Canada Certificate of Competency at the Master Mariner, Fishing Master First Class or Engineering First Class level or equivalent,
  5. Category E: applicants who have Canadian Forces (Naval Operations) training acceptable to the Admissions Committee.
3. Applications to the program will be considered by the appropriate admissions committee(s).

~~4. In accordance with the **UNIVERSITY REGULATIONS – Residence Requirements – Second Degree**, students completing the Bachelor of Maritime Studies Program, as a second degree, must complete all required courses within the Bachelor of Maritime Studies Program.~~

**5.3 Admission Requirements for Applicants to the Bachelor of Technology Program**

1. The application for admission or readmission is submitted online; current and returning ~~Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ applicants should apply using the Admissions menu within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin). Applicants who are new to ~~the Fisheries and~~ Marine Institute ~~of Memorial University of Newfoundland~~ should follow the application instructions at [www.mun.ca/undergrad/apply](http://www.mun.ca/undergrad/apply). This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.

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2. **Categories for admission to the Bachelor of Technology Program**

Applicants must meet the regular admission requirements of the University and be eligible for admission in one of the following categories:

- Category A: applicants holding a diploma of technology, excluding Nautical Science, from the Marine Institute,
- Category B: applicants holding a diploma of technology accredited by the Canadian Technology Accreditation Board (CTAB) or Technology Accreditation Canada (TAC), or the Canadian Medical Association (CMA),
- Category C: applicants holding a diploma of technology comparable to a Marine Institute diploma of technology,
- Category D: applicants holding a Certified Engineering Technologist (CET) designation or a Professional Technologist (PTech) designation along with a diploma of technology acceptable to the Admissions Committee,
- Category E: applicants who have Canadian Forces training acceptable to the Admissions Committee,
- Category F: applicants who hold a diploma of technology from an institution with which the Marine Institute has an articulation agreement.

3. Upon acceptance into the program, students will be admitted to one of the two options: the Engineering and Applied Science Technology Option or the Health Sciences Technology Option. Students may be permitted to change their option with the approval of the Marine Institute Committee on Undergraduate Studies.

4. Applications to the program will be considered by the appropriate admissions committee(s).

~~5. In accordance with the **UNIVERSITY REGULATIONS – Residence Requirements – Second Degree**, students completing the Bachelor of Technology program, as a second degree, must complete all required courses in their stream of study within the Bachelor of Technology program.”~~

Page 151, 2018-2019 Calendar, under the heading 6.1 Bachelor of Maritime Studies, amend the section as follows:

**“6.1 Bachelor of Maritime Studies**

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in **Table 2 Bachelor of Maritime Studies - Course Requirements For All Students**. These courses may have prerequisites which have to be met.
- A maximum of 9 transfer credit hours applicable to the degree may be used to meet the degree requirements.

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- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Maritime Studies a candidate shall successfully complete the following program with a minimum overall average of 60% and a minimum numeric grade of 50% in each course required for the degree unless stated otherwise within the course description.
- Students must take 39 credit hours with 21 credit hours from the required courses and 18 credit hours from the electives.
- At least three electives must be chosen from Group A and at least one elective must be chosen from Group B.”

Page 152, 2018-2019 Calendar, under the heading 6.2 Bachelor of Technology, amend the section as follows:

**“6.2 Bachelor of Technology**

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in **Table 3 Bachelor of Technology - Engineering and Applied Science Technology Option** and **Table 4 Bachelor of Technology - Health Science Technology Option**. These courses may have prerequisites which have to be met.
- A maximum of 9 transfer credit hours applicable to the degree may be used to meet the degree requirements.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Technology a candidate shall successfully complete the program with a minimum overall average of 60% and a minimum numeric grade of 50% in each course required for the degree unless stated otherwise within the course description.”

Page 152, 2018-2019 Calendar, under the heading 8 Graduation, amend the section as follows:

**8 Graduation**

Upon meeting the qualifications for any of the degree programs of the ~~Fisheries and~~ Marine Institute a student must apply by the appropriate deadline date to graduate on the prescribed “Application for Graduation” form. This form may be obtained on-line at the Memorial Self Service at [www.mun.ca/regoff/stuweb.htm](http://www.mun.ca/regoff/stuweb.htm). Additional information is available from the Office of the Registrar at [www.mun.ca/regoff/graduation](http://www.mun.ca/regoff/graduation).



51.18 School of Music

Page 412, 2018-2019 Calendar, under the heading 13.2 Ensemble Techniques Courses, add the following new courses:

**“3300 Ensemble Leadership I** is an introductory course on ensemble leadership in both choral and instrumental settings. Beginning with an overview of leadership concepts and theories, the course helps students situate themselves within the variety of approaches to organisational leadership, helping them develop conceptual and practical understanding of leadership in their own musical lives. The course then moves to the application of leadership in both choral and instrumental contexts with an emphasis on the development of practical and artistic elements, including but not limited to: conducting techniques, rehearsal techniques, applied aural skills, score study, musical interpretation.

AR: Attendance is required

PR: MUS240B

**Abbreviated Course Title:** Ensemble Leadership I

**3301 Ensemble Leadership II** is a continuation of Music 3300, with further emphasis placed on reflexive leadership development, and practical and artistic development in ensemble leadership settings, including but not limited to: conducting techniques, rehearsal techniques, applied aural skills, score study, musical interpretation.

AR: Attendance is required

PR: MUS3301

**Abbreviated Course Title:** Ensemble Leadership II”

Page 412, 2018-2019 Calendar, under the heading 13.2 Ensemble Techniques Courses, amend the section as follows:

**“13.2 Ensemble Techniques Courses**

All courses in ensemble techniques are available only to candidates for the degree of Bachelor of Music except where specified.

~~**2311 Voice/Choral Materials I** is a practical study, in a class situation, of vocal production, choral conducting and rehearsal techniques. This course is open to Bachelor of Music degree students and students in the Music Concentration Program for the Bachelor of Education (Primary or Elementary) degree.~~

~~**2312 Voice/Choral Materials II** is a continuation of MUS 2311.~~

~~PR: MUS 2311~~

**3221 Brass Techniques I** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing brass instruments.

CH: 1

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**3222 Brass Techniques II** meets one hour per week. A continuation of MUS 3221. Students whose Principal Applied Study is a brass instrument must have the permission of the instructor to take this course.

CH: 1

**3231 Flute Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the flute.

CH: 1

UL: may not be taken for credit by students whose Principal Applied Study is flute.

**3232 Single Reed Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the clarinet and/or saxophone.

CH: 1

PR: permission of the instructor for students whose Principal Applied Study is clarinet or saxophone.

**3233 Double Reed Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the oboe and/or bassoon.

CH: 1

PR: permission of the instructor for students whose Principal Applied Study is oboe or bassoon.

**3241 Upper String Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the violin and viola.

CH: 1

UL: may not be taken for credit by students whose Principal Applied Study is violin or viola

**3242 Lower String Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the cello and string bass.

CH: 1

PR: permission of the instructor for students whose Principal Applied Study is cello or string bass.

**3261 Guitar Techniques** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing the guitar.

CH: 1

UL: may not be taken for credit by students whose Principal Applied Study is guitar.

**3271 Organ Techniques** - inactive course.

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**3272 Harpsichord Techniques** - inactive course.

**3281 Percussion Techniques I** meets one hour per week. Practical study, in a class situation, of the basic techniques of playing percussion instruments.

CH: 1

UL: may not be taken for credit by students whose Principal Applied Study is percussion.

**3282 Percussion Techniques II** meets one hour per week and is a continuation of MUS 3281.

CH: 1

PR: MUS 3281

UL: may not be taken for credit by students whose Principal Applied Study is percussion.

~~**3321 Instrumental Conducting I** is the practical study of conducting and rehearsal techniques for band and orchestra.~~

~~AR: attendance is required~~

~~CR: the former MUS 3311, 3312, 3313, 3314~~

~~PR: MUS 1108~~

~~**3322 Instrumental Conducting II** is continuation of MUS 3321.~~

~~AR: attendance is required~~

~~CR: the former MUS 3315, 3316~~

~~PR: Music 3321"~~

Page 405, 2018-2019 Calendar, under the heading 6.4 Comprehensive Major, amend the section as follows:

**"6.4 Comprehensive Major**

To be awarded the degree of Bachelor of Music with a Comprehensive Major, a candidate shall comply with the School's regulations, and successfully complete a minimum of 123 credit hours, including 55 credit hours in the **Core Program**. The remaining 68 credit hours will be chosen as follows:

1. Music 340A/B, 440A/B
- ~~2. Music 2311, 2312, 3321, 3322~~ Music 3300 and 3301
3. Four credit hours of instrumental techniques courses, chosen as follows:
  - a. Music 3221 or 3222
  - b. One of Music 3231, 3232, 3233
  - c. Music 3241 or 3242
  - d. Music 3281 or 3282
4. Music 3401 or 3411, 3402 or 3412.

School of Music (cont'd)

5. ~~Nineteen~~ Twenty-Five additional credit hours chosen from Music courses beyond the 1000 level including:
  - a. At least 3 credit hours chosen from courses beyond the 2000 level in Musicologies and Music Theory/Composition.
  - b. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the **Core Program**.
  - c. A maximum of 5 credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518 in addition to those listed under the **Core Program**.
  - d. No more than 3 credit hours from Music 2021, 2022 and 2023.
  - e. Three credit hours chosen from the following may be substituted for Music electives in the Comprehensive Major: Education 2500, 2515, 2520.
6. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses.”

Page 407, 2018-2019 Calendar, under the heading 6.10 Bachelor of Music Conjoint with Bachelor of Music Education, amend the section as follows:

**“6.10 Bachelor of Music Conjoint with Bachelor of Music Education**

To be awarded the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education, a candidate shall comply with the School's regulations and successfully complete a minimum of 159 credit hours, including 55 credit hours in the **Core Program**. The remaining 104 credit hours will be chosen as follows:

1. Music 340A/B, 440A/B.
2. ~~Music 2311, 2312, 3321, 3322~~ Music 3300 and 3301.
3. Eight credit hours chosen from: Music 3221, 3222, 3231, 3232, 3233, 3241, 3242, 3261, 3281, 3282.
4. Music 3401 or 3411, 3402 or 3412.
5. ~~Six~~ Twelve additional credit hours chosen from Music courses beyond the 1000 level including:
  - a. A maximum of 4 credit hours from Music 2611-2614, 2619, 2620, and 263A/B, in addition to those listed under the **Core Program**.
  - b. A maximum of 5 credit hours from Music 2615, 2616, 2617, 265A/B, 3500, the former 3510, 3511-3518 in addition to those listed under the **Core Program**.
  - c. No more than 3 credit hours from Music 2021, 2022 and 2023.

School of Music (cont'd)

6. Forty-five credit hours as prescribed by the Faculty of Education under the **Regulations for the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education**.
7. Twenty-four credit hours chosen from disciplines other than Music and Music Education, including at least 6 credit hours from courses in English, designated Critical Reading and Writing (CRW) courses, and/or former Research/Writing (R/W) courses. Conjoint degrees students are strongly encouraged to take at least 18 credit hours in a second teachable subject.”

51.19 Department of Biology

Page 458, 2018-2019 Calendar, under the heading 10 Joint Program Regulations, amend the section as follows:

**10 Joint Program Regulations**

The following Joint Major, Joint Honours and Joint Option programs which lead to the awarding of a General Degree of Bachelor of Science or an Honours Degree of Bachelor of Science are offered by departments in the Faculty of Science. They are governed by **Programs of Study for the General Degree of Bachelor of Science** and **Programs of Study for the Honours Degree of Bachelor of Science** as appropriate.

A joint degree program, which leads to the awarding of both the General Degree of Bachelor of Science and the General Degree of Bachelor of Arts, can be found under the Faculty of Science at **Joint Degrees of Bachelor of Science and Bachelor of Arts** and under the Faculty of Humanities and Social Sciences at **Joint Degrees of Bachelor of Arts and Bachelor of Science**.

Course descriptions are found at the end of the Faculty of Science section under **Course Descriptions**.

**10.1 Joint Majors**

**10.1.13 Marine Biology Joint Major**

The Joint Major in Marine Biology is jointly administered by the Department of Ocean Sciences and the Department of Biology. ~~It consists of core courses in oceanography and biology, and additional courses in various Science subjects.~~ More information on recommended courses and time tables can be found in the Handbook of Undergraduate Studies available on both departmental websites.

Students who wish to enroll in the program should seek academic advising well in advance to ensure they have completed the appropriate

## Department of Biology (cont'd)

prerequisites. Entry to required courses may be limited and determined by academic performance. Students are advised to consult with the Department of Ocean Sciences and the Department of Biology at their earliest opportunity. Each student registered in the program will be assigned an ~~faculty~~ advisor who should be consulted on academic issues, including course selection.

### **10.1.13.1 Admission Requirements**

Admission to the program is based on academic standing. To be considered for admission to the program, students ~~must~~ will normally have completed ~~33 credit hours with an overall average of at least 60%.~~ The following courses must normally have been completed (or their equivalents) with an overall average of at least 60%:

1. Biology 1001 and 1002 with an average grade of 65%;
2. Chemistry 1050 and 1051 ~~(or 1010 and 1011)~~ (or 1200 and 1001);
3. ~~Earth Sciences 1000;~~
4. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses;
5. Mathematics 1000;
6. Ocean Sciences 1000 with a minimum grade of 65%;
- ~~and~~ -
7. Physics 1020 ~~and 1021~~ (or 1050 ~~and 1051~~); and
8. Physics 1021 (or 1051) or one Ocean Sciences course at the 2000 level.

~~Chemistry 1050 and 1051 (or 1010 and 1011) should be taken in the first year, as it is a prerequisite for other required courses in the programs, and delaying chemistry until second year may make it difficult to complete the program in the normal four years.~~

Students should be aware that delaying some of the above courses, particularly Chemistry 1050/1051, until second year may make it difficult to complete the program in the normal four years.

### **10.1.13.2 Program of Study**

Students pursuing a Joint Major in Marine Biology are required to complete a minimum ~~of 33 credit hours in Biology and 33 credit hours in Ocean Sciences as follows of 60 combined credit hours from Biology and Ocean Sciences, with a minimum of 27 credit hours in each subject:~~

1. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses;
2. Mathematics 1000;
3. Earth Sciences 1000;

Department of Biology (cont'd)

4. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550;
5. Physics 1020 and 1021 (or equivalent 1050 and 1051);
6. Chemistry 1050 and 1051 (or 1010 and 1011) (or 1200 and 1001), and and 2440 (or 2400 and 2401);
7. Biochemistry 2201 or the former 2101, and 3106;
8. Biology 1001, 1002, 2060, 2122, 2250 (or Biochemistry 2100), 2600, 2900, 3710 (or Ocean Sciences 2000) and 3711;
9. ~~additional courses required to complete 33 credit hours in Biology, except Biology 2040, 2041, 2120, 3053, and 3820, making sure the program includes an overall minimum of 6 credit hours in Biology at the 3000/4000 level;~~
10. Ocean Sciences 1000, 2000 (or Biology 3710), 2001, 2100, and 2500; and at least one of Ocean Sciences 2200 or 2300; additional courses required to complete 33 credit hours in Ocean Sciences, including a minimum of 12 credit hours at the 3000/4000 level; and
11. additional courses to complete the required 60 combined credit hours in Biology and Ocean Sciences with a minimum of 27 credit hours in each subject (except Biology 2040, 2041, 2120, 3053, and 3820). A minimum of 6 credit hours in Biology at the 3000/4000 level and 12 credit hours in Ocean Sciences at the 3000/4000 level is required; and
12. other courses as necessary to complete the minimum of 120 credit hours required for the General Degree of Bachelor of Science.

**Notes:**

1. *Courses cross listed between Biology and Ocean Sciences can only count for one subject or the other.*
2. *A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.*
3. *Students currently enrolled in the former Major in Biology (Marine) have the option of continuing the program as listed previously, or switch to the new Joint Major in Marine Biology outlined above.*
3. Students are encouraged to take Biochemistry 3206 as it is a pre-requisite for several higher-level courses in Biology and in Ocean Sciences.

Page 501, 2018-2019 Calendar, under the heading 12.2 Biology, amend the section as follows:

**“4605 Quantitative Methods in Biology** (same as Statistics 4581 and the former Statistics 4605) is quantitative reasoning using verbal, graphical and statistical models of scaled quantities (units and dimensions). Exploratory and confirmatory analysis of field and laboratory data. Hypothesis testing, including randomization tests. Topics include the general linear model (t-tests, ancova etc), correlation, ~~autocorrelation~~,

Department of Biology (cont'd)

~~geographic statistics, estimates of population size and multivariate methods, mixed models, Poisson and logistic regression.~~

CR: Statistics 4581 and the former Statistics 4605

LH: 3

PR: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550"

51.20 Department of Biochemistry

Page 498, 2018-2019 Calendar, under the heading 12.1 Biochemistry, amend the section as follows:

**"2901 Biochemistry Laboratory** develops robust basic biochemistry lab skills in the context of a biotechnology project; students purify and characterize a recombinantly expressed enzyme. Students learn skills including safety, pipetting, buffer calculations, making solutions, protein bioinformatics, techniques for protein enrichment, enzyme kinetics measurements and calculations, graphing data, keeping a lab book, teamwork, critical analysis and presentation of their work in several formats. Students may co-author a scientific publication based on their results.

AR: attendance is required in the laboratory component of this course

CO: Chemistry 2400

~~LC: 1 hour~~

LH: 3

~~OR: 1 hour tutorial per week~~

PR: Chemistry 1051, Science 1807 and 1808

**3402 Food Chemistry** examines the following topics: water structure and the role of water in chemical reactions and mechanical properties of foods; chemistry and physical properties of carbohydrates, proteins and lipids; food dispersions; pigments and natural colorants; food flavour; enzyme properties and applications; vitamins and minerals; chemistry of enzymic and non-enzymic browning; characteristics of: muscle tissue, milk, eggs, bread and edible plant tissue; food additives; and, chemical changes in foods during processing.

LH: ~~one period~~ 3 hours per week

PR: BIOC 2005; BIOC 2201 or the former 2101; Chemistry 2400, and Science 1807 and 1808

**3906 Nutritional Biochemistry and Metabolism Laboratory** teaches advanced biochemical lab and critical thinking skills with a focus on metabolism and nutrition-related biochemistry. Topics may include animal diet formulation, tissue culture, immunoblots, metabolic flux assays, metabolic regulation, nutrient metabolism, metabolomics and metabolic energetics. Students develop their quantitative reasoning, teamwork, and written and oral communication skills. Students may have



Department of Biochemistry (cont'd)

opportunities to tour lab facilities and to co-author a scientific publication based on their results.

AR: attendance is required in the laboratory component of this course

CO: BIOC 3106 or 3206

~~LC: 1 hour~~

LH: 3

~~OR: 1 hour tutorial per week~~

PR: BIOC 2901, Science 1807 and 1808; ~~BIOC 3106 or 3206~~

**3907 Molecular Biology Laboratory** develops biochemical lab and critical thinking skills through a molecular biology focused project. Topics may include restriction digestion, PCR amplification-based techniques, recombinant DNA and plasmid construction, gene expression systems, nucleic acid bioinformatics, and application of high through-put methods in molecular biology. Students develop their quantitative reasoning, teamwork and communication skills (written and oral). Students may have the opportunity to coauthor a peer-reviewed scientific publication based on their results.

AR: attendance is required in the laboratory component of this course

~~LC: 1 hour~~

LH: 3

~~OR: 1 hour tutorial per week~~

PR: BIOC 2901, Science 1807 and 1808, and one of BIOC 2100, 2200, Biology 2250

**4200 Bioenergetics and Biological Oxidation** examines topics such as: respiration and electron transport; the functional organization of energy transducing membranes; the structure and function of flavoenzymes, cytochromes, iron-sulfur proteins and quinones; enzyme reduction of oxygen; and, free radicals in biological systems.

LC: two to three hours per week and assigned reading

PR: BIOC 3106 or 3206

**4210 Biochemical Research Techniques I** examines the proteome and the genome. This course is designed to familiarize students with current methodology employed in the analyses of the complements of proteins and genes resident in eukaryotic cells. Emphasis will be placed on techniques that facilitate the simultaneous functional analyses of large numbers of proteins or genes. A variety of techniques, used in the study of expression and functional proteomics, will be described, including 2D PAGE, tagged proteins, fluorophores, mass spectrometry and protein microarrays. Techniques used in the study of gene expression and functional genomics will also be described, including the use of reporter gene constructs, analysis of protein-DNA interactions, expressions of cloned genes and several experimental approaches used to define the eukaryotic transcriptome.

AR: attendance is required

PR: BIOC 3105 or 3206 (or 3106)

Department of Biochemistry (cont'd)

**4230 Lipid and Lipoprotein Metabolism** is designed to provide current knowledge about advances and controversies in lipid and lipoprotein metabolism in the context of health and disease. Topics to be covered include advanced knowledge about lipid and lipoprotein synthesis and regulation, reverse cholesterol transport, plus lipid and lipoprotein utilization to regulate cellular and physiological functions. The covered topics will be related to areas such as reproductive biology, atherosclerosis, AIDS, Alzheimer's, and cancer.

CR: BIOC 6000

PR: **One of** BIOC 3106, 3206 ~~or~~, Pharmacy 3111

**4240 Nutrigenetics and Nutrigenomics** is designed to familiarize students with emerging discoveries in the area of diet-gene interaction and to further their understanding of the relationships between the genome and diet as well as the potential to design personalized diets for better health. Students will develop an appreciation for the role of nutrients in the prevention and/or development of disease.

PR: BIOC 2100 or Biology 2250; BIOC 3106 or 3206; and one of BIOC 3203 or the former BIOC 3200

~~**499A and 499B Dissertation** is a two-semester linked course based on independent study of a problem in Biochemistry. The subject of study will be decided in consultation with Faculty advisors and must be approved in advance by the Department. This dissertation is obligatory for Honours students in Biochemistry. The dissertation will be submitted as a formal written report accompanied by appropriate illustration before the end of the tenth week of the second semester. Before the end of the student's final semester the student will give an oral presentation of research.~~

is the independent study of a problem in Biochemistry and is obligatory for Honours students in Biochemistry and Biochemistry(Nutrition). Faculty advisors will guide the subject of study which must be approved by the Department Head or delegate. The written dissertation shall be submitted by the end of the tenth week of the second semester. At the end of that semester the student will give an oral presentation and answer questions on their study.

CH: 6

PR: Honours students in their final year or permission of the Head; Science 1807 and 1808

OR: Occasional classes will be held to guide and advise students in the preparation of their written reports. Students are expected to attend these classes."

Page 467, 2018-2019 Calendar, under the heading 11.1.1.1 Admission to the Major in Biochemistry, amend the section as follows:

Department of Biochemistry (cont'd)

**“11.1.1.1 Admission to the Major in Biochemistry**

Entry to the Biochemistry Majors program is based on academic standing.

1. To be considered for admission to the program students must have at least 30 credit hours in courses and have successfully completed the following courses (or their equivalents) with a minimum overall average of 60%. In addition, students must be eligible for entry to Chemistry 2400.
  - a. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
  - b. Chemistry 1050 and 1051 (or 1200 and 1001)
  - c. Mathematics 1000, 1001 (or Mathematics 1090, 1000, or Mathematics 109A/B, 1000)
  - d. Physics 1050 (or 1020), 1051 (or 1021), or Biology 1001, 1002

**Notes:**

- ~~1. Students are required to complete at least 78 credit hours in Science courses for the General Degree.~~
- ~~2. 1. Students taking Mathematics 1000 should take Physics 1050 as their first Physics course.~~
- ~~3. 2. It is recommended that students who wish to pursue future studies in biophysics or related fields or who are considering postgraduate health professional programs take Physics 1050 as their first Physics course.~~

~~Students are encouraged to choose a minor.”~~

Page 467, 2018-2019 Calendar, under the heading 11.1.1.2 Admission to the Honours Degree in Biochemistry, amend the section as follows:

**“11.1.1.2 Admission to the Honours Degree in Biochemistry**

Students normally should apply for an Honours program at the completion of their third year of studies. To be eligible for admission, students must be in Honours standing as per **Academic Standing** in the **Degree Regulations** for the Honours Degree of Bachelor of Science. To be considered for early admission to an Honours program in Biochemistry at the end of second year, students must have achieved at least 70% in each of Biochemistry 2200 (or the former 2100) and Biochemistry 2201 or the former 2101 and Chemistry 2400, 2401.”

Page 468, 2018-2019 Calendar, under the heading 11.1.2.1 Major in Biochemistry, amend the section as follows:

Department of Biochemistry (cont'd)

**“11.1.2.1 Major in Biochemistry**

Entry to the Nutrition majors program is based on academic standing.

1. Required courses to complete the major:
  - a. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
  - b. Biology 1001 and 1002; Mathematics 1000, 1001; Physics 1050 (or 1020), 1051 (or 1021); Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
  - c. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3108, 3206, 3207, and 3906 or 3907.
  - d. At least 9 credit hours in courses from Biochemistry 4002, 4101, 4103, 4104, 4105, 4200, 4201, 4230, 4231-4239.
  - e. Six additional credit hours chosen from: Medicine 310A/B, Biochemistry 2600, Biology 2060, 3050, Chemistry 4201, 4701 or Biochemistry courses at the 3000 or 4000 level.
  - f. Chemistry 2301 or Physics 2053; Chemistry 2400, 2401.
  - g. One of Chemistry 2100, Environmental Sciences 3210.
  - h. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the degree total up to 120 credit hours.”

Page 468, 2018-2019 Calendar, under the heading 11.1.2.4 Major in Nutrition, amend the section as follows:

**“11.1.2.4 Major in Nutrition**

1. Required courses to complete the major:
  - a. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
  - b. Biology 1001 and 1002; Mathematics 1000, Physics 1020 and 1021 (or Physics 1050 and 1051; Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
  - c. Biochemistry 2005, 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3906, 4300, 4301, Medicine 310A/B.
  - d. Six credit hours in courses from Biochemistry 3052, 3108, 3207, 3402, 3600, 3907, 4002, 4105, 4200, 4230, 4240, 4241-4249, Biology 3050.
  - e. Chemistry 2400.
  - f. Statistics 2550 or equivalent.
  - g. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the total for the degree up 120 credit hours.”

Page 468, 2018-2019 Calendar, under the heading 11.1.2.5 Honours Degree in Nutrition, amend the section as follows:

Department of Biochemistry (cont'd)

**“11.1.2.5 Honours Degree in Nutrition**

1. Required courses:
  - a. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
  - b. Biology 1001 and 1002; Mathematics 1000, Physics 1020 (or 1050) and 1021 (or 1051); Chemistry 1050, 1051 (or Chemistry 1200 and 1001).
  - c. Biochemistry 2005, 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3207, 3906, 4300, 4301, 4502, 499A, 499B, Medicine 310A/B
  - d. Nine additional credit hours chosen from Biochemistry 3052, 3108, 3402, 3600, ~~3906~~, 3907, 4002, 4105, 4200, 4201, 4230, 4240, 4241-4249, Biology 3050.
  - e. Chemistry 2400
  - f. Statistics 2550
  - g. A sufficient number of elective courses to bring the total Science courses up to at least 78 credit hours and the total for the degree up 120 credit hours.”

51.21 Department of Computer Science

Page 509, 2018-2019 Calendar, under the heading 12.4.3 Third Year Courses, amend the section as follows:

**“3100 Web Programming studies the Web information system from a programming perspective. It teaches how Web data are transferred across the network, how to design interactive browser contents, and how to provide dynamic pages from the server.**

**CR: COMP 3715**

**PR: COMP 2006**

**Abbreviated Course Title: Web Programming**

**3715 Network Computing with WEB Applications** studies how distributed applications (e.g., client/server Web applications) are constructed using the Internet. Topics covered include: the socket interface for network communication, client/server applications, browser scripting using Javascript, content generation for web applications (e.g., jsp, php), html/css documents, and the use of cryptography to handle security.

**CR: COMP 2006 and COMP 3100**

**PR: COMP 2711 or COMP 2002”**

Page 507, 2018-2019 Calendar, under the heading 12.4.1 First Year Courses, amend the section as follows:

Department of Computer Science (cont'd)

**“1003 Foundations of Computing Systems** provides an in-depth introduction to foundational topics in computer science: algorithms and data structures, theory of computing, machine architecture and their historical context.

CO: COMP 1002 or Mathematics 2320

LH: 3

PR: COMP 1001

**Abbreviated Course Title:** Foundations of Computing Sys

**1000 Computer Science – An Introduction** is a gentle introduction to computer science. In a breadth-first overview approach it discusses important aspects of computer science including fundamentals in algorithms, binary data representation, Boolean logic and its implementation, machine architecture, systems software, networking concepts, programming languages, databases, and selected Computer Science subfields.

CR: COMP 1700. Students cannot receive credit for COMP 1000 if they have previously successfully completed, or are currently registered for, COMP 1003.”

Page 508, 2018-2019 Calendar, under the heading 12.4.2 Second Year Courses, amend the section as follows:

**“2001 Object-Oriented Programming and Human-Computer Interaction** advances from Introduction to Programming and studies object-oriented programming. Additional topics include event-driven programming, program correctness and simple refactoring, as well as interfaces and human-computer interaction. A brief overview of programming languages is also provided.

**CR: COMP 2710**

**LH: 3**

**PR: COMP 1001, COMP 1003, and Mathematics 1000**

**2002 Data Structures and Algorithms** covers fundamental data structures, algorithms and algorithm design techniques. A problem-driven course, it focuses on computational problem solving from designing an efficient algorithm to implementing it using appropriate data structures.

**CR: COMP 2711**

**LH: 3**

**PR: COMP 1001, COMP 1002, and COMP 1003**

**2003 Computer Architecture** introduces computer architecture at the digital logic implementation level, at the instruction set level, and at the level where programming languages are translated into the underlying machine instructions.

**CR: COMP 3724**

**LH: 3**

**PR: COMP 1001, COMP 1002, and COMP 1003”**

Department of Computer Science (cont'd)

Page 507, 2018-2019 Calendar, under the heading 12.4 Computer Science, amend section as follows:

**“12.4 Computer Science**

Computer Science courses are designated by COMP.

**12.4.1 First Year Courses**

**1000 Computer Science – An Introduction** is a gentle introduction to computer science. In a breadth-first overview approach it discusses important aspects of computer science including fundamentals in algorithms, binary data representation, Boolean logic and its implementation, machine architecture, systems software, networking concepts, programming languages, databases, and selected Computer Science subfields.

CR: the former COMP 1700

LH: 3

**1001 Introduction to Programming** is an introduction to fundamental programming techniques, primitive data types, and to simple algorithms and their design concepts.

CR: the former COMP 1710

LH: 3

**1002 Introduction to Logic for Computer Scientists** introduces methods of reasoning and logic tools that underlie computer science. In particular, this course covers propositional and predicate logic, sets and other discrete structures, as well as modular arithmetic and basic counting, with emphasis on their applications in computer science.

CR: the former COMP 2742, Engineering 4424, Mathematics 2320. Students cannot receive credit for COMP 1002 if completed with, or subsequent to, Mathematics 2320.

LH: 3

**1400 Computing in the 20th Century and Beyond** will give an overview of the development of computing technologies over the last 75 years as well as both the perception of these technologies by, and their impact on, society. The course will be organized chronologically by decade, and within each decade will examine the dominant computing developments, their image in various print and pictorial media, and their social impact. The aim is to give students of all disciplines an appreciation of the abilities and limitations of computer technology and how such technologies interact with society.

**1401 Computing at the Movies** will both examine and counter common misconceptions about computing and the computing profession. This will

Department of Computer Science (cont'd)

be done by contrasting depictions of various aspects of computing in various movies and documentaries produced over the last 60 years with the reality of these aspects as given in selected readings and course lecture notes.

**1510 An Introduction to Programming for Scientific Computing** introduces students to basic programming in the context of numerical methods with the goal of providing the foundation necessary to handle larger scientific programming projects. Numerical methods to solve selected problems from Physics, Chemistry, and Mathematics will be covered.

CR: the former COMP 2602 and the former Mathematics 2120

LH: 2

PR: Mathematics 1000

~~1550 Introduction to Multimedia Application Development is an introduction to programming and computer science with an emphasis on the development of multimedia applications. The course introduces the fundamental principles of programming, including object-oriented and event-driven programming, how to use and create classes and methods and combine them with multimedia libraries to produce animations, handle input from keyboard and mouse, and import sounds and videos to produce multimedia applications which can be directly deployed on the Internet.~~

~~CR: COMP 2300~~

~~LH: 3~~

**1600 Basic Computing and Information Technology** offers an overview of information technology. It provides students with an understanding of basic concepts and necessary skills required to use spreadsheet, database and presentation software to manage, analyze, and present data.

CR: the former Business 2700, the former COMP 2650 and the former COMP 2801

LH: 3

~~1700 Introduction to Computer Science~~ lays the foundation for the art and the science of computing. The course contains fundamental and topical issues in computers, languages, programming and applications. This course is designed for potential Computer Science majors without a background in programming, but is also available for non-majors.

~~CR: COMP 1000~~

~~LH: 3~~

~~1710 Object-Oriented Programming I~~ is an introduction to fundamental programming techniques, primitive data types and



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~~operations, program control structures and the use of objects, classes and methods.~~

~~CR: COMP 2710 or COMP 1001~~

**12.4.2 Second Year Courses**

**2000 Collaborative and Emergent Behaviour** is a survey of computation as a means of understanding, modelling, and describing artificial and natural systems. The emergence of complex behaviour from the interaction of simple rules governing individual components is illustrated and discussed, as well as the role of communication between system components. Selected systems to be studied will be drawn from different topic areas which may include the worldwide web, the mind (cognitive science), formal logic, autonomous robotics, chaos and fractals, and bioinformatics. Each topic will incorporate an associated laboratory experience.

LH: 3 hours bi-weekly

**2001 Object-Oriented Programming and Human-Computer Interaction** advances from Introduction to Programming and studies object-oriented programming. Additional topics include event-driven programming, program correctness and simple refactoring, as well as interfaces and human-computer interaction. A brief overview of programming languages is also provided.

CR: the former COMP 2710

LH: 3

PR: COMP 1001, Mathematics 1000

**2002 Data Structures and Algorithms** covers fundamental data structures, algorithms and algorithm design techniques. A problem-driven course, it focuses on computational problem solving from designing an efficient algorithm to implementing it using appropriate data structures.

CR: the former COMP 2711

LH: 3

PR: COMP 1001, COMP 1002

**2003 Computer Architecture** introduces computer architecture at the digital logic implementation level, at the instruction set level, and at the level where programming languages are translated into the underlying machine instructions.

CR: the former COMP 3724

LH: 3

PR: COMP 1001, COMP 1002

**2004 Introduction to Operating Systems** introduces fundamental techniques for interfacing between computer software and hardware platforms, including the composition of, and connections within, a

Department of Computer Science (cont'd)

multilevel operating system. Students learn how to design substantial parts of an operating system.

CR: the former COMP 3725

PR: COMP 2002, COMP 2003

**2005 Software Engineering** introduces students to the different software process models, to project management and the software requirements engineering process, as well as to systems analysis and design as a problem-solving activity.

CR: the former COMP 3716

PR: COMP 2001

**2006 Computer Networking** introduces students to the use of programming interfaces for computer networking and to understand how the Internet works on the level of protocols. It focuses on the most commonly used of those protocols that are in the vast majority of modern computer systems.

CH: 1

CO: COMP 2004

CR: the former COMP 3715

PR: COMP 2001, COMP 2002

**2007 Introduction to Information Management** introduces the basic knowledge needed for managing large volumes of data. It covers topics in information management and database systems from storage and retrieval to security and privacy of data.

CH: 1

CO: COMP 2004

CR: the former COMP 3754

PR: COMP 2002

**2008 Social Issues and Professional Practice** covers ethical and social considerations of computing to provide students with the basis to address these issues by ethical and technical actions. Case studies are used to illustrate ethical and social issues of computing.

CH: 1

CR: the former COMP 2760

PR: COMP 1000

**2100 Social Web Analysis** covers the analysis of social network structures, the flow of data within them and the methods to extract useful information about these networks, their participants and the content of their communication. Security and trust issues are also covered.

PR: COMP 1000

**2300 Introduction to Multimedia Programming** is an introduction to programming and computer science with an emphasis on the

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development of multimedia applications. The course introduces the fundamental principles of programming, including object-oriented and event-driven programming. Students will develop an understanding of how to use and create classes and methods and combine them with multimedia libraries to produce animations, handle input from keyboard and mouse, and import sounds and videos to produce multimedia applications which can be directly deployed on the Internet.

CR: the former COMP 1550

LH: 3

PR: COMP 1000

**2500 Data Analysis with Scripting Languages** introduces the use of scripting languages to solve common data analysis tasks. The control structures and expressions of the language are first discussed. Script solution to storing/retrieving data sets, searching data sets, and performing numeric and statistical calculation are covered. Plotting and visualization for data sets are also presented.

PR: COMP 1510 or the former COMP 1700 or the former COMP 1710 or COMP 1000 or COMP 1001 (or equivalent)

**2510 Programming in C/C++** is a comprehensive treatment of the C/C++ programming languages. It is intended for students with some first programming experience. This course starts with a discussion of fundamentals of C and C++, moves on to the object-oriented aspects of C++, and introduces some advanced topics. It is an essential course for mastering the power of this rich programming language.

CR: Engineering 3891

LH: 3

PR: COMP 1510 or the former COMP 1550 or the former COMP 1700 or the former COMP 1710 or COMP 1000 or COMP 1001 or Engineering 1020 (or equivalent)

~~**2710 Object-Oriented Programming II** continues from Object-Oriented Programming I, and studies object-oriented and event-driven programming. Additional topics include: recursion, basic analysis of algorithms, fundamental data structures such as simple linked structures and stacks, and fundamental computing algorithms such as binary search and quadratic time sorting. A brief overview of programming languages, virtual machines and language translations is also provided.~~

~~CR: COMP 2001~~

~~LH: 3~~

~~PR: COMP 1710 and Mathematics 1000~~

~~**2711 Introduction to Algorithms and Data Structures** includes the study of standard ways of organizing and manipulating data in computer storage. Fundamental concepts in the design and analysis of algorithms are also discussed.~~

Department of Computer Science (cont'd)

CR: COMP 2002

LH: 3

PR: COMP 2710. It is recommended that students complete COMP 2742 prior to registering for COMP 2711

**2718 Development Tools, Work Flows and Concepts** covers tools, work flows and concepts used in software development in a concentrated introductory set of topics. The essential work flows (with their underlying concepts) used to edit, build, test, combine with existing software and find existing software are introduced. The tools covered include text editors, programming language translators, file management tools, debuggers, scripting tools, source control tools, and building, testing and deployment tools. The architecture and use of an Integrated Development Environment are discussed.

LH: 3

PR: COMP 2500 or COMP 2510 or the former COMP 2710

~~**2742 Logic for Computer Science** is an introduction to propositional and predicate logic with applications. The use of the system of boolean logic in reasoning and circuit design, as well as basic proof techniques and the resolution principle, for both propositional and predicate logic, will be covered. Concepts involving sets will be used to illustrate different types of proof techniques. The probable intractability of boolean logic and Goedel's incompleteness theorem will be presented.~~

CR: COMP 1002

PR: COMP 1710 or COMP 1001, and Mathematics 1000

~~**2760 Encountering the Computer: Society and the Individual** examines social, ethical, legal and cultural issues surrounding the use of computers in modern society. These broader social issues are followed by an examination of the use of social and individual psychology in user interface design. Students will be expected to demonstrate an understanding of these issues both directly (through verbal and written discourse) and practically, as applied to the creation of actual software artifacts.~~

CO: COMP 2710 or COMP 2001

CR: COMP 2008

PR: two 1000-level English courses, or equivalent

### 12.4.3 Third Year Courses

**3200 Algorithmic Techniques for Smart Systems** covers basic algorithmic techniques and data structures that are used to embed basic intelligent behaviors, such as problem solving, reasoning and learning in software systems and agents.

CR: the former COMP 4753

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PR: COMP 2001 or the former COMP 2710, ~~and~~ COMP 2002 or the former COMP 2711, and Statistics 1510 or Statistics 2550

**3201 Introduction to Nature-Inspired Computing** provides an overview of popular nature-inspired computing methods. Methods that are inspired by both biological and non-biological systems are considered. These methods have been applied to solve problems in various areas of computing such as optimization, machine learning, and robotics. Particular examples of nature-inspired computing methods studied include cellular automata, neural networks, evolutionary computing, swarm intelligence, artificial life, and complex networks. Contributions made in the field of nature-inspired computing that have led to advances in the natural sciences are also discussed.

CR: the former COMP 4752

PR: COMP 2002 or the former COMP 2711

**3202 Introduction to Machine Learning** introduces concepts and algorithms in machine learning for regression and classification tasks. The course gives the student the basic ideas and intuition behind model selection and evaluation, and selected machine learning methods such as random forests, support vector machines, and hidden Markov models.

PR: COMP 3200; or COMP 2001 or the former COMP 2710, ~~and~~ COMP 2002 or the former COMP 2711, and Statistics 2550

**3300 Interactive Technologies** provides exposure to traditional desktop, mobile and games contexts with respect to interaction design theory and practice. The impact of context on design principles is explored. An introduction to each programming context will be provided and a minimal set of software development tools for each context will be introduced. Practical application of interaction design principles will involve design and prototyping of desktop, mobile and games applications.

PR: COMP 2001 or the former COMP 2710

**3301 Visual Computing and Applications** provides students with the fundamental knowledge and skills in the fields of computer vision, computer graphics, and visualization. Visual perception is responsible for most of our impressions about the world around us. This course introduces how computers are used to both mimic the human visual system (e.g., recognize shapes) and to create visual content (e.g., synthesize images). Related techniques on image synthesis, processing and analysis are discussed under a unified framework. How visual computing principles were used to create visual effects in movies and commercials is also examined.

PR: COMP 2002 or the former COMP 2711

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**3401 Introduction to Data Mining** introduces students to the basic concepts and techniques for data mining and knowledge discovery. Students will develop an understanding of the essential data mining technologies, and be able to design and evaluate methods for simple data mining applications.

PR: COMP 2002 or the former COMP 2711, COMP 2007 or the former COMP 3754, and Statistics 2550

**3550 Introduction to Bioinformatics** (same as Biology 3951) deals with the development and application of computational methods to address biological problems. The course will focus on the fundamental concepts, ideas and related biological applications of existing bioinformatics tools. This course will provide hands-on experience in applying bioinformatics software tools and online databases to analyze experimental biological data, and it will also introduce scripting language tools typically used to automate some biological data analysis tasks.

CR: Biology 3951

LH: 3

PR: Biology 2060 or Biochemistry 2201 or the former 2101, and one Computer Science course at the 1000-level or above excluding COMP 1400, COMP 1600 and COMP 2000; or COMP 2500 or the former COMP 2710 or COMP 2001, and one Biology course at the 1000-level or above excluding Biology 2040 and Biology 2041; or permission of the course instructor

**3700 Industrial Experience** is a course for students who are admitted to CIIO. Students are required to register for this non-credit course every semester during their internship. This course is open only to students who have been accepted into the Internship Program and provides an opportunity for qualified students to obtain rewarding job experience of 8, 12 or 16 months of continuous duration, during the course of their studies.

CH: 0

PR: admission to the Computer Industry Internship Option (CIIO)

**3710 Vocational Languages** is a study of several programming languages of vocational significance. The use of appropriate programming paradigms to solve some significant problems will be illustrated.

PR: COMP 2711 or COMP 2002 or the former COMP 2711

~~**3715 Network Computing with WEB Applications** studies how distributed applications (e.g., client/server Web applications) are constructed using the Internet. Topics covered include: the socket interface for network communication, client/server applications, browser scripting using Javascript, content generation for web applications (e.g.,~~

Department of Computer Science (cont'd)

~~jsp, php), html/css documents, and the use of cryptography to handle security.~~

~~CR: COMP 2006~~

~~PR: COMP 2711 or COMP 2002~~

~~**3716 Software Methodology** studies the development of software by gathering the requirements of the software program, analysing the requirements to create a development model, and creating the software and documents for the software product. This course studies techniques for all three software development activities.~~

~~CR: COMP 2005~~

~~PR: COMP 2711 or COMP 2002~~

**3718 Programming in the Small** demonstrates the tools and techniques used in the construction of small software systems. The software tools and techniques to be covered include analysis and design of software components, software construction tools (e.g. linkers, builders, debuggers), software library use and design, and system integration.

~~PR: COMP 2711 or COMP 2002~~ or the former COMP 2711

**3719 Theory of Computation and Algorithms** is an introduction to formal algorithmic problem solving. Various algorithm design techniques that sometimes yield efficient solutions are studied. Deterministic and nondeterministic machines (finite state automata, pushdown automata and Turing machines) are discussed and used to efficiently solve problems such as the String Matching Problem, the parsing of Context-free Languages, and to introduce the theory of NP-completeness. In addition, Turing machines are used to prove the unsolvability of certain problems. Tractable, intractable and undecidable problems are contrasted. Basic issues related to parallelization are discussed as well.

CR: the former COMP 3711 and the former COMP 3740

PR: ~~COMP 2711 or COMP 2002~~ or the former COMP 2711; and Mathematics 2320 or COMP 1002

~~**3724 Computer Organization** can be studied at the digital logic implementation level, the instruction set architecture level, and the translation of programming languages to the underlying machine instruction level. This course studies computer organization at these levels.~~

~~CR: COMP 2003~~

~~PR: COMP 2711 or COMP 2002; and COMP 2742 and Mathematics 2320, or COMP 1002~~

~~**3725 Computer Architecture and Operating Systems** covers system design and the architectural implementations of these designs. The objective is to develop the basic concepts of processor design, memory management, operating systems, and I/O devices and their interactions.~~

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CR: COMP 2004

PR: COMP 3724 or COMP 2003

**3731 Introduction to Scientific Computing** main objectives are the development of algorithms for the numerical solution of mathematical problems and the study of the numerical stability of these algorithms. The efficiency of these algorithms with respect to speed and storage requirements is considered as well. Emphasis is also placed on the study of the sensitivity of selected problems to perturbations in the data. There is also a brief introduction to the development of numerical algorithms that take advantage of advanced computer architectures, such as pipeline processors, array processors and parallel processors.

CR: Mathematics 3132

PR: Mathematics 2000 and Mathematics 2050, and ~~COMP 2710~~ or COMP 1001 or the former COMP 2710

**3753 Computational Aspects of Linear Programming** is an introduction to the Linear Programming Problem (LPP). The emphasis is placed upon developing the most recent and numerically reliable algorithms for the solution of the Linear Programming Problem. The numerical stability of these algorithms will be examined as well. Geometric understanding of the LPP. Simplex method for the LPP. Sparse matrix LPP. Duality and postoptimality analysis. Extensions to the simplex algorithm. Principles of interior algorithms for the LPP.

PR: Mathematics 2050, and ~~COMP 2710~~ or COMP 2001 or the former COMP 2710

~~**3754 Introduction to Information and Intelligent Systems** introduces students to application areas that are away from usual number-based and text-based processing. Students will learn the basic concepts and become aware of the historical developments and social and ethical issues related to the application areas such as intelligent systems and information management. This exposure will help students to become knowledgeable about managing large volumes of data and dealing with problems that are well defined but whose algorithmic solutions are not feasible or problems that are fuzzily defined.~~

~~CR: COMP 2007~~

~~PR: COMP 2711 or COMP 2002, and COMP 2742 or COMP 1002~~

#### 12.4.4 Fourth Year Courses

**4300 Introduction to Game Programming** is an introductory course for students interested in learning the fundamentals of game programming. Topics include vector math for games, fundamentals of rendering, introduction to animation and artificial intelligence, collision detection, game physics and user-interfaces. Students are required to write a fully functional game during the course.

PR: COMP 2001 or the former COMP 2710



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**4301 Computer Vision** (same as Engineering 8814) studies how to develop methods that enable a machine to “understand” or analyze images. The course introduces the fundamental problems in computer vision and the state-of-the-art approaches that address them. Topics include feature detection and matching, geometric and multi-view vision, structure from X, segmentation, object tracking and visual recognition.

CR: Engineering 8814

PR: COMP 3301 or Engineering 7854 or permission of the instructor

**4302 3D Computer Graphics** introduces the students to the state-of-the-art concepts and developments in the field of 3D computer graphics. The underlying algorithms, as well as the basic techniques to develop interactive 3D graphics systems including games and simulators, are presented. Topics of the course include 3D geometrical transformations, 3D projections, 3D modeling and rendering, 3D graphics languages and systems. Advanced photorealistic rendering and image-based rendering techniques may also be covered.

CR: the former COMP 4751

PR: COMP 3301

**4303 Artificial Intelligence in Computer Games** provides an introduction to specific state-of-the-art algorithmic techniques and data structures that are used to efficiently implement human-like abilities (e.g., awareness, memory, rational decision-making (under uncertainty), movement, co-operation in groups) in computer game agents.

PR: COMP 3200

**4304 Data Visualization** covers interactive representation of data using a modern programming library. Topics include an introduction to the software platform and the principles for data selection, analysis, design and creation of dynamic visualizations. Students produce interactive web-based objects, addressing problems in the presentation and understanding of large data collections. The techniques discussed are applicable to different sources and types of data.

CR: the former COMP 4767

PR: COMP 2001 or the former COMP 2710, COMP 2002 or the former COMP 2711

**4550 Bioinformatics: Biological Data Analysis** (same as Biology 4606) provides students with the basis to analyse a variety of biological data within an integrated programming environment for data manipulation, calculation and graphical display. Students will learn to extract meaningful information from data generated by high-throughput experimentation. The course will introduce one such integrated programming environment and will explore the computational and statistical foundations of the most commonly used biological data analysis procedures.

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CR: Biology 4606

LH: 3

PR: Biology 3951 or COMP 3550, and Statistics 2550 (or equivalent), or permission of the course instructor

**4711 Structure of Programming Languages** covers programming language design considerations; syntactic and semantic structure; survey of typical features and operations; analysis of facilities for control and data structuring; language extensibility; execution models; formal specification of programming languages.

PR: COMP 3719, and ~~COMP 3724~~ or COMP 2003 or the former COMP 3724

**4712 Compiler Construction** studies properties of formal grammars and languages; syntax-directed parsing and code generation; top-down and bottom-up parsing methods; LL(k) and LR(k) grammars and parsers; Code optimization; compiler writing tools.

PR: COMP 3719, and ~~COMP 3724~~ or COMP 2003 or the former COMP 3724

**4715 and 4717 Special Topics in Programming Languages** will have topics to be studied announced by the Department.

**4718 Survey of Software Engineering** surveys the major topics of software engineering. Areas covered include: requirements capture, system design and design approaches, verification and validation (including formal methods and testing), and management of the software development process.

PR: ~~COMP 3716~~ or COMP 2005 or the former COMP 3716

**4721 Operating Systems** studies the design and implementation of an operating system's kernel. The main components used in operating system implementations include: context switches, process management, memory management, interprocess communication, file systems and system calls. The data structures and algorithms used in implementing the above components are studied. The different architectural styles of kernel implementation are also considered. Real-time operating systems are also discussed.

CR: Engineering 8894

PR: ~~COMP 3725~~ or COMP 2004 or the former COMP 3725

**4723 Introduction to Microprocessors** examines the architecture and instruction sets for several microprocessors. The use of microprocessors as device controllers; comparisons of hardware and programmed techniques; microprocessor interfacing with external devices; methods of I/O; bus structures; modern microprocessor support devices are discussed.

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LH: Minimum of three hours per week. Practical experience with basic principles will be obtained through laboratory experience.

PR: ~~COMP 3724~~ or COMP 2003 or the former COMP 3724

**4726-4729 Special Topics in Computer Systems** will have topics to be studied announced by the Department.

**4734 Matrix Computations and Applications** is an introduction to linear algebra; solution to linear systems; scaling, improving and estimating accuracy; the linear least squares problem; the eigenvalue problem; singular value decomposition of a matrix; the generalized eigenvalue problem.

PR: COMP 3731

**4736-4739 Special Topics in Numerical Computations** will have topics to be studied announced by the Department.

**4740 Design and Analysis of Algorithms** will give an overview of techniques for the design of efficient optimal-solution and heuristic algorithms. It will include an introduction to various advanced data structures for set and string processing that are used to further optimize algorithm efficiency.

PR: COMP 3719

**4741 Formal Languages and Computability** is an in-depth study of various types of formal machines and their associated languages. Effective computability and other formalisms, such as lambda calculus will be studied as well.

CR: the former COMP 3740

PR: COMP 3719

**4742 Computational Complexity** is an in-depth discussion of computational complexity theory. Topics covered in the course include: models of computation (for both serial and parallel computations); complexity measures; reducibility; complexity classes (NP, PSPACE, NC, LOGSPACE and P); and randomized computations.

PR: COMP 3719

**4743 Graph Algorithms and Combinatorial Optimization** discusses classical problems in combinatorial optimization and graph algorithms, including matching, colorability, independent sets, isomorphism, network flows and scheduling. Special families of graphs are discussed and algorithms that would otherwise be NP-hard or complete are shown to be polynomial time when restricted to such families.

PR: COMP 3719

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**4745-4749 (Excluding 4748) Special Topics in Theoretical Aspects** will have topics to be studied announced by the Department.

~~**4748 Introduction to the Science of Complexity** is an exploration of the use of computers in the simulation of complex systems. Some theories and models, such as cellular automata, artificial life, fractals, genetic algorithms, chaos, and evolution will be discussed and will be used in the modelling of "real-life" systems. The approach in this course is practical. Students have to write a number of programs of different levels of sophistication including a final project.~~

~~PR: COMP 3719~~

**4750 Introduction to Natural Language Processing** covers tasks involving human languages, such as speech recognition, text understanding, and keyword-based information retrieval which underlie many modern computing applications and their interfaces. To be truly useful, such natural language processing must be both efficient and robust. This course will give an introduction to the algorithms and data structures used to solve key NLP tasks, including utterance understanding and generation and language acquisition, in both of the major algorithmic paradigms used today (rule-based and statistical). The emphasis will be primarily on text-based processing though speech-based processing will be addressed where possible.

PR: COMP 3719 and Statistics 1510

~~**4751 Computer Graphics** examines display devices, display processors, display file compilers, display transformations, structured display files, graphical input devices, perspective, hidden line elimination, languages and graphics systems.~~

~~CR: COMP 4302~~

~~LH: 3~~

~~PR: COMP 3719 and Mathematics 2050~~

~~**4752 Introduction to Computational Intelligence** provides an introduction to four of the fundamental computational intelligence methods: artificial neural networks, evolutionary computation, swarm intelligence and fuzzy systems. The integration of these techniques for problem solving will also be introduced.~~

~~CR: COMP 3201~~

~~PR: COMP 3719 and COMP 3754~~

~~**4753 Artificial Intelligence** has selected topics from AI programming languages; heuristic searching; problem solving; game playing; knowledge representations; knowledge based systems; reasoning in uncertainty situations; planning; natural language understanding; pattern recognition; computer vision; and machine learning.~~

~~CR: COMP 3200~~

~~PR: COMP 3719 and COMP 3754~~

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**4754 Database Systems** introduces students to database processing, database management systems and database design considerations. It will cover the theory and methodologies essential for the relational database design, implementation, manipulation, optimization and management.

PR: ~~COMP 3725 or~~ COMP 2004 or the former COMP 3725, and ~~COMP 3754 or~~ COMP 2007 or the former COMP 3754

**4756 Image Processing** will centre on the key analytical and algorithmic tools and concepts of digital image processing. Topics will include Transformations, Enhancement, Encoding, Data Bases, Segmentation and Description.

CR: Engineering 7854

LH: 3

PR: COMP 3719

**4759 Computer Networks** looks at how the operation of computer networks requires the following: a) communication between two computers, b) information transfer between two computers not directly connected, and c) services that need computer communication. This course focuses on the standard solutions and services used to fulfill the previous requirements. These include: physical transmission of signals, reliable communication based on unreliable communication channels, the routing of messages between connected computers to reach computers that are not directly connected, e-mail, file transfer, name servers, remote terminal access and the World Wide Web. Particular attention will be placed on the workings of the Internet.

PR: ~~COMP 3715 or~~ 2006 or the former COMP 3715, and ~~COMP 3725 or~~ COMP 2004 or the former COMP 3725

**4762 Introduction to Computational Molecular Biology** will give an overview of computational problems and algorithms for these problems associated with a variety of analyses of biological molecular data.

PR: COMP 3719

**4766 Introduction to Autonomous Robotics** examines the fundamental constraints, technologies, and algorithms of autonomous robotics. The focus of this course will be on computational aspects of autonomous wheeled mobile robots. The following topics will be covered: major paradigms in robotics, methods of locomotion, kinematics, simple control systems, sensor technologies, stereo vision, feature extraction, modelling uncertainty of sensors and positional information, localization, SLAM, obstacle avoidance, and 2-D path planning.

LH: 3

PR: ~~COMP 2711 or~~ COMP 2002 or the former COMP 2711, Mathematics 2000, Mathematics 2050, and Statistics 1510 or Statistics 2550 or the former Statistics 2510

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~~**4767 Information Visualization and Applications** focuses on the design and implementation of interactive visualization techniques for the analysis, comprehension, exploration, and explanation of large collections of abstract information. Topics to be covered include principles of visual perception, information data types, visual encodings of data, representation of relationships, interaction methods, understanding user goals and tasks, and evaluation techniques. Case studies of accepted techniques and the current state of the art in information visualization will be presented.~~

~~CR: COMP 4304~~

~~PR: COMP 2760 or COMP 2008, and COMP 3719~~

**4768 Software Development for Mobile Devices** focuses on the design and implementation of software in a mobile networking environment. The primary topics to be covered in this course include software engineering, network computing, graphics programming, and human-computer interaction for mobile devices. A modern mobile device with advanced networking and graphic features, including multi-touch interaction and motion sensors will be used as the primary platform for development in this course.

LH: One and one-half hours per week

PR: ~~COMP 2760 or COMP 2008~~ or the former COMP 2760, COMP 3715 or COMP 2006 or the former COMP 3715, and COMP 3716 or COMP 2005 or the former COMP 3716

**4770 Team Project** has as its main objective to develop a working prototype of a software system as a team effort. A group of students will work on a project for a term, experiencing the advantages and difficulties of team projects.

AR: attendance is required

PR: ~~COMP 3715 or COMP 2006~~ or the former COMP 3715, COMP 3716 or COMP 2005 or the former COMP 3716, COMP 3724 or COMP 2003 or the former COMP 3724, and COMP 3754 or COMP 2007 or the former COMP 3754

**4780 Honours Project** introduces computer science honours students to research activities, familiarizes them with a special problem in computer science, and provides independent study on an advanced topic under the direct supervision of a member of the computer science faculty. The topic is decided in consultation with the supervisor. The student is required to produce a written report on the project, to include the literature search on the topic, and to present this work at a departmental seminar prior to the last week of the semester.

PR: admission to the honours program and permission of the Head of Department

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**4800-4825 Special Topics** will be offered as departmental resources permit.

CO: Special topics courses are not offered on a regular basis, but whenever departmental resources permit. For these reasons, the co-requisites can vary each time the courses are offered.

PR: Special topics courses are not offered on a regular basis, but whenever departmental resources permit. For these reasons, the prerequisites can vary each time the courses are offered.”

Page 79, 2018-2019 Calendar, under the heading 6.4 Information Systems, amend the section as follows:

**“6.4 Information Systems**

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

1. Six of BUSI 5700, BUSI 5701, BUSI 5702, BUSI 5703, BUSI 6700, BUSI 6701, BUSI 7700, and BUSI 7701; and
2. a. either Geography 2195, Geography 3260, and one of Geography 3202, Geography 4202, Geography 4261  
b. or three of the following: the former Computer Science 1710, Computer Science 2500, the former Computer Science 2710, the former Computer Science 2760, Computer Science 3710, the former Computer Science 3715, the former Computer Science 4761, the former Computer Science 4767.”

Page 79, 2018-2019 Calendar, under the heading 6.7 Operational Research, amend the section as follows:

**“6.7 Operational Research**

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

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

Page 80, 2018-2019 Calendar, under the heading 7 Business Electives, amend the section as follows:

Department of Computer Science (cont'd)**7 Business Electives**

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

**Table 3 Business Electives**

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



BUSI 5701	BUSI 6510	BUSI 7400	Economics 3080	
BUSI 5702	BUSI 6550	BUSI 7410	Economics 3150	
BUSI 5703	BUSI 6605	BUSI 7415	Economics 3360	
BUSI 6000-6029	BUSI 6610	BUSI 7500	Economics 4025	

Page 206, 2018-2019 Calendar, under the heading 13.7 Computer Science, amend the section as follows:

**“13.7 Computer Science**

~~**1700 Introduction to Computer Science** lays the foundation for the art and the science of computing. The course contains fundamental and topical issues in computers, languages, programming and applications. This course is designed for potential Computer Science majors without a background in programming, but is also available for non-majors.~~

~~CO: Mathematics 1090 or 109B (or equivalent), or Mathematics 1000~~

~~LH: 3~~

~~PR: Mathematics 1090 or 109B (or equivalent), or Mathematics 1000”~~

Page 191, 2018-2019 Calendar, under the heading 7.4.2 Bachelor of Science with Major in Computational Mathematics, amend the section as follows:

**7.4.2 Bachelor of Science with Major in Computational Mathematics**

[www.grenfell.mun.ca/mathematics](http://www.grenfell.mun.ca/mathematics)

This Mathematics Major covers the essential undergraduate topics in mathematics, develops rigorous logical thinking, and equips students with computational techniques to model and solve real-world problems. Courses used to complete the requirements of this major may be used to meet the requirements of a minor or second major in a different subject area excluding a minor in Science and a major in General Science.

- The 120 credit hour, 40 course program may be completed on a full or part-time basis as set out under Table 5 Bachelor of Science with Major in Computational Mathematics.
- A student must complete Core Program Requirements as outlined under Grenfell Campus Core Program Requirements.
- A student must complete an approved concentration of courses known as a Major and elective courses to make up the required total of 40 courses, 120 credit hours. A Minor is not required for this program.

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**Table 5 Bachelor of Science with Major in Computational Mathematics**

<b>Required Courses</b>	<b>Elective Courses</b>
Courses as outlined under Grenfell Campus Core Program Requirements, Breadth of Knowledge Requirement, Literacy Requirement, and Quantitative Reasoning and Analysis Requirement	Elective courses to make up the total of 120 credit hours, other than those required for the Grenfell Campus Core Program Requirement and Major/Minor requirements, may be chosen according to the following guidelines:  Any courses in arts, social science, science and fine arts and Up to 15 credit hours in other subject areas.
3 credit hours in a computer programming course Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2320, 3000, 3132, 3240, 4242, 4950 Philosophy 2030 or the former 2210 3 credit hours in Physics chosen from Physics 1020, 1050, 2151, or 2400 Statistics 2550 (or equivalent) 12 further credit hours in Mathematics and Statistics including 3 credit hours at the 2000 level or higher; 6 credit hours at the 3000 level or higher; and 3 credit hours at the 4000 level (Computer Science 2510 and <u>the former</u> 2710, and Physics 2820 and 3820 may be used in place of an equivalent level Mathematics course)	If a student decides to complete a minor, it must be comprised of 8 courses, 24 credit hours chosen from Table 23 Minor Programs Offered by the School of Arts and Social Science, or from Table 5 Minor Program Offered by the School of Fine Arts, or from Table 11 Minor Programs Offered by the School of Science and the Environment.

Page 196, 2018-2019 Calendar, under the heading 7.4.6 Minor Programs Offered by the School of Science and the Environment, amend the section as follows:

**7.4.6 Minor Programs Offered by the School of Science and the Environment**

[www.grenfell.mun.ca/minor](http://www.grenfell.mun.ca/minor)

**Table 11 Minor Programs Offered by the School of Science and the Environment**

<p><b>Mathematics Minor</b> Mathematics 1000, 1001 either 18 additional credit hours from Mathematics and Statistics courses at the 2000 level or higher, at least 6 credit hours shall be in courses at the 3000 level or higher (Physics 3820 can be used in place of a Mathematics course at the 3000 level); or 15 additional credit hours from Mathematics and Statistics courses at the 2000</p>
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level or higher, at least 6 credit hours shall be in courses at the 3000 level or higher (Physics 3820 can be used in place of a Mathematics course at the 3000 level); and  
3 credit hours in one of Computer Science 1510, the former 1710, or Engineering 1020

Page 507, 2018-2019 Calendar, under the heading 12.4.1 First Year Courses, amend the section as follows:

**“1000 Computer Science – An Introduction** ~~is a gentle introduction to computer science. In a takes a breadth-first overview approach to the discussion of it discusses~~ important aspects of computer science including fundamentals in algorithms, binary data representation, Boolean logic ~~and its implementation, machine architecture~~, systems software, networking concepts, introductory programming languages, databases, and selected Computer Science subfields.”

Page 509, 2018-2019 Calendar, under the heading 12.4.3 Third Year Courses, amend the section as follows:

**“3202 Introduction to Machine Learning** introduces concepts and algorithms in machine learning for regression and classification tasks. The course gives the student the basic ideas and intuition behind model selection and evaluation, and selected machine learning methods such as random forests, support vector machines, and hidden Markov models.  
PR: COMP 3200; or COMP 2001 and COMP 2002 and Statistics 2550; and Mathematics 2050.

**3301 Visual Computing and Applications** provides students with the fundamental knowledge and skills in the fields of computer vision, computer graphics, and visualization. Visual perception is responsible for most of our impressions about the world around us. This course introduces how computers are used to both mimic the human visual system (e.g., recognize shapes) and to create visual content (e.g. synthesize images). Related techniques on image synthesis, processing and analysis are discussed under a unified framework. How visual computing principles were used to create visual effects in movies and commercials is also examined.  
PR: COMP 2002, Mathematics 2000, and Mathematics 2050

**3550 Introduction to Bioinformatics** (same as Biology 3951) deals with the development and application of computational methods to address biological problems. The course will focus on the fundamental concepts, ideas and related biological applications of existing bioinformatics tools. This course will provide hands-on experience in applying bioinformatics software tools and online databases to analyze experimental biological data, and it will also introduce scripting language tools typically used to automate some biological data analysis tasks.

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CR: Biology 3951

LH: 3

PR: Biology 2060 or Biochemistry 2101, and 3 credit hours in ~~one~~ Computer Science courses at the 1000-level or above excluding COMP 1400, COMP 1401, COMP 1600 and COMP 2000; or COMP 2500 or COMP 2710 or COMP 2001, and 3 credit hours in ~~one~~ Biology courses at the 1000-level or above excluding Biology 2040 and Biology 2041; or permission of the course instructor"

Page 501, 2018-2019 Calendar, under the heading 12.2 Biology, amend the section as follows:

**"3951 Introduction to Bioinformatics** (same as Computer Science 3550) deals with the development and application of computational methods to address biological problems. The course will focus on the fundamental concepts, ideas and related biological applications of existing bioinformatics tools. This course will provide hands-on experience in applying bioinformatics software tools and online databases to analyze experimental biological data, and it will also introduce scripting language tools typically used to automate some biological data analysis tasks.

CR: Computer Science 3550

LH: 3

PR: Biology 2060 or Biochemistry 2101, and 3 credit hours in Computer Science courses at the 1000-level or above excluding COMP 1400, COMP 1401, COMP 1600 and COMP 2000; or COMP 2500 or COMP 2710 or COMP 2001, and 3 credit hours in Biology courses at the 1000-level or above excluding Biology 2040 and Biology 2041; or permission of the course instructor"

Page 510, 2018-2019 Calendar, under the heading 12.4.4 Fourth Year Courses, amend the section as follows:

**"4300 Introduction to Game Programming** is an introductory course for students interested in learning the fundamentals of game programming. Topics include vector math for games, fundamentals of rendering, introduction to animation and artificial intelligence, collision detection, game physics and user-interfaces. Students are required to write a fully functional game during the course.

PR: COMP 2001, Mathematics 2050, and 6 credit hours in Computer Science courses at the 3000 level or above (COMP 3301 and COMP 3731 are recommended)

**4770 Team Project** has as its main objective to develop a working prototype of a software system as a team effort. A group of students will work on a project for a term, experiencing the advantages and difficulties of team projects.

Department of Computer Science (cont'd)

AR: attendance is required

PR: ~~COMP 3715 or COMP 2006, COMP 3716 or COMP 2005, COMP 3724 or COMP 2003, and COMP 3754 or COMP 2007; or COMP 2003, COMP 2005, COMP 2006, COMP 2007, and 6 credit hours in Computer Science courses at the 3000 level or above~~"

Page 478, 2018-2019 Calendar, under the heading 11.4.3 Major in Computer Science (Visual Computing and Games) (B.Sc. only), amend the section as follows:

**"11.4.3 Major in Computer Science (Visual Computing and Games) (B.Sc. only)**

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science (Visual Computing and Games):
  - a) Computer Science 1000, 1001, 1002, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008;
  - b) Computer Science 3300, 3301, and 4300;
  - c) Six additional credit hours in Computer Science courses selected from Computer Science 2300, 3200, 4301, 4302, 4303\*, 4304; and
  - d) Three additional credit hours in Computer Science courses selected from those listed in c. above, or Computer Science 2100, 4766, 4768.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

\* Students interested in completing COMP 4303 must complete COMP 3200."

Page 459, 2018-2019 Calendar, under the heading 10.1.8 Computer Science and Statistics Joint Major (B.Sc. only), amend the section as follows:

**"10.1.8 Computer Science and Statistics Joint Major (B.Sc. Only)**

The following courses are required:

1. Computer Science 1000, 1001, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, 3731, 4734, plus ~~45~~ 12 further credit hours in Computer Science courses numbered 3000 or higher.
2. Statistics 1510 or 2500 or 2550, and 2501 or 2560.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2320, 3340, Statistics 3410, 3411, 3520, 3521, 3540, 4590.
4. Nine further credit hours in Statistics courses numbered 3000 or higher including at least a 3 credit hour course numbered 4000 or higher excluding Statistics 4581."

Department of Computer Science (cont'd)

Page 465, 2018-2019 Calendar, under the heading 10.2.15 Computer Science and Physics Joint Honours (B.Sc. only), amend the section as follows:

**“10.2.15 Computer Science and Physics Joint Honours (B.Sc. only)**

The following courses are prescribed:

1. Chemistry 1050 and 1051 (or Chemistry 1010, 1011, and the former 1031) (or 1200 and 1001).
2. Computer Science 1000, 1001, 1002, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 3731.  
Nine additional credit hours in Computer Science courses numbered 3000 or higher, including at least 3 credit hours in courses at the 4000 level.
3. Physics 1050 (or 1020) and 1051.  
Physics 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3750, 3800, and 3820.  
Three additional credit hours in Physics at the 4000 level.
4. Physics 490A and Physics 490B or Computer Science 4780 and 3 additional credit hours in Computer Science at the 4000 level.
5. Mathematics 1000 and 1001.  
Mathematics 2000, 2050, 2260, and 3202.
6. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
7. Two electives to bring the total credit hours to 120. Computer Science 2500 and Statistics 2550 are recommended.

The topic for the honours project or thesis, Computer Science 4780 or Physics 490A/B, must be chosen with the prior approval of both departments.”

Page 478, 2018-2019 Calendar, under the heading 11.4.7 Computer Industry Internship Option (CIIO), amend the section as follows:

**“~~11.4.7 Computer Industry Internship Option (CIIO)~~ Co-operative Internship in Computer Science (CICS)**

~~The Computer Industry Internship Option (CIIO)~~ Co-operative Internship in Computer Science (CICS) provides an opportunity for qualified students to obtain rewarding placements that help them develop practical skills in a real work setting before graduation. ~~The CIIO~~ CICS is available to Computer Science Majors who will typically apply between their third and fourth year of studies.

**11.4.7.1 Admission Requirements**

In order to be considered for admission to the ~~CIIO~~ CICS, an applicant:

1. must be a declared Computer Science Major;
2. must be registered as a full-time student at the time of application;

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3. must have successfully completed Computer Science 1000, 1001, 1002, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 6 credit hours at the 3000 level;
4. must have at least 15 credit hours remaining after the internship in order to satisfy degree requirements, 3 of which must be in Computer Science; and
5. is expected to return to University as a full-time student after the internship.

In addition to the above, admission is also subject to academic performance.

**11.4.7.2 Internship Duration:**

Subject to the availability of job openings, a student may choose either an 8, 12 or 16 consecutive month internship period.

**11.4.7.3 Internship Guidelines:**

1. Internship employment is normally organized by Co-operative Education; however, students who have been accepted to the ~~CHO~~ CICS may also obtain their own internship placements. All placements are subject to the approval of Co-operative Education and of the Head of the Department of Computer Science.
2. Students who have applied to the internship program give permission to Co-operative Education to supply prospective employers with copies of their resume and transcript.
3. After being placed with an employer, students are not permitted to drop their internship without prior approval from Co-operative Education and the Head of the Department of Computer Science. Students who drop an internship without permission, who fail to honour an agreement to work with an employer, or who conduct themselves in such a manner as to cause their discharge from the placements, will normally be awarded a fail grade for the internship period and may not be permitted to reapply.

***Note:** Students should also refer to the UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate).*

**11.4.7.4 Registration, Assessment of Performance, and Assignment of Grades:**

Students must register for the course Computer Science 3700 every semester during their internship.

Computer Science 3700 is a non-credit course open only to students who have been accepted into the Internship Program.

Department of Computer Science (cont'd)

During the internship, the employer and intern will complete student performance evaluations every four months and will submit them to Co-operative Education. The final assessment of total work performed is the responsibility of Co-operative Education, and will be based upon both input from the employer and the intern's report(s).

The Internship evaluation shall consist of two components:

1. On-the-job Student Performance: Job performance shall be assessed by Co-operative Education in consultation with the Department using information gathered during the internship and input from the employer. Evaluation of the on-the-job student performance will result in one of the following classifications: PASS WITH DISTINCTION, PASS, FAIL.
2. Internship Report(s): Evaluation of the internship report(s) will result in one of the following classifications: PASS WITH DISTINCTION, PASS, FAIL.

The evaluation of the on-the-job student performance and the internship report(s) are recorded separately on the transcript.

Overall evaluation of the internship will result in one of the following final grades being awarded:

1. PASS WITH DISTINCTION: indicates outstanding performance in both the internship report(s) and the on-the-job student performance. PASS WITH DISTINCTION has been awarded to each of the internship report(s) and the on-the-job student performance.
2. PASS: indicates that performance meets expectations in both the internship report(s) and on-the-job student performance. The student meets the requirements of a passing mark in the internship report(s) and on-the-job student performance.
3. FAIL: indicates failing performance in either the internship report(s) or on-the-job student performance or both.

Also, the following will be noted in the transcript of the intern:

1. Requirements for the ~~Computer Industry Internship Option~~ Co-operative Internship in Computer Science have been completed. Internship Duration: - months.
2. A grade of NC (No Credit) for Computer Science 3700 will be awarded in all semesters of the Co-operative Internship ~~Option~~ prior to the final Semester.

**11.4.7.5 ~~CHO~~ CICS and Honours Program**

In case a student is enrolled in both the Honours program and the ~~CHO~~ CICS, the requirements of both must be met. Upon approval from the honours project supervisor within the Department, the employer and the Head of the Department of Computer Science, an internship project may



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be submitted as a component of an honours project. These arrangements must be made within the first semester of the Internship placement.”

Page 509, 2018-2019 Calendar, under the heading 12.4.3 Third Year Courses, amend the section as follows:

“**3700 Industrial Experience** is a course for students who are admitted to ~~CHO-CICS~~. Students are required to register for this non-credit course every semester during their internship. This course is open only to students who have been accepted into the Internship Program and provides an opportunity for qualified students to obtain rewarding job experience of 8, 12 or 16 months of continuous duration, during the course of their studies.

CH: 0

PR: admission to the ~~Computer Industry Internship Option~~ Co-operative Internship in Computer Science (CHOCICS)”

Page 44, 2018-2019 Calendar, under the heading 6.1 Classification of Students, amend the section as follows:

**“6.1 Classification of Students**

**1. Full-time students:**

- a) Students who have been admitted to this University and who are registered for the duration of any semester in at least 9 credit hours or at least 5 credit hours in a session are deemed full-time students.
- b) Notwithstanding the above and the regulations governing the Marine Institute technology diploma programs, students who have been declared as pre-Bachelor of Technology or pre-Bachelor of Maritime Studies are deemed full-time students if they are registered for either: three non-degree courses and a minimum of 3 degree credit hours, or two non-degree courses and a minimum of 6 degree credit hours.
- a) Students who are registered for the duration of any semester in a co-operative education work term, the internship required of the ~~Computer Industry Internship Option~~ Co-operative Internship in Computer Science (CHOCICS), the International Internship Option in the International Bachelor of Arts (INTL 399W), or the Structured Practice Experiences, the Professional Practice Experiences, and the Advanced Professional Practice Experiences required of the School of Pharmacy will be deemed full-time students.
- b) Provided they had been admitted to the University, the members of the Executive of the Memorial University of Newfoundland Students’ Union (MUNSU), the Grenfell Campus Student Union (GCSU) and the Marine Institute Student Union (MISU) shall be

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deemed, for the purpose of membership on University committees, the Senate and the Board of Regents, to be full-time students during their tenure.

2. **Part-time students** are students who have been admitted to the University and who are registered for fewer than 9 credit hours in any semester or fewer than 5 credit hours in any session.
3. **First-year students** are students who have earned fewer than 18 credit hours.
4. **Second-year students** are students who have earned from 18 to 47 credit hours inclusive.
5. **Third-Year Students** are students who have earned from 48 to 77 credit hours inclusive.
6. **Fourth-Year Students** are students who have earned from 78 to 107 credit hours inclusive.
7. **Fifth-Year Students** are students who have earned not fewer than 108 credit hours.”

Page 477, 2018-2019 Calendar, under the heading 11.4.1 Major in Computer Science, amend the section as follows:

**“11.4.1 Major in Computer Science**

As a component of the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate, a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science:
  - a) Computer Science ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008.
  - b) At least 6 additional credit hours in Computer Science at the 4000 level.
  - c) Twelve additional credit hours in Computer Science at the 3000 level or beyond.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: Students are encouraged to take Mathematics 3000 and Statistics 2560.”

Page 478, 2018-2019 Calendar, under the heading 11.4.2 Major in Computer Science (Smart Systems) (B.Sc. only), amend the section as follows:

Department of Computer Science (cont'd)

**“11.4.2 Major in Computer Science (Smart Systems) (B.Sc. only)**

As a component of the Degree Regulations for the General Degree of Bachelor of Science a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science (Smart Systems):
  - a) Computer Science ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008;
  - b) Computer Science 3200, 3201, 3202 and 3301; and
  - c) Six additional credit hours in Computer Science courses selected from Computer Science 3401, 3550, 4301, 4303, 4750, 4766.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.”

Page 478, 2018-2019 Calendar, under the heading 11.4.3 Major in Computer Science (Visual Computing and Games) (B.Sc. only), amend the section as follows:

**“11.4.3 Major in Computer Science (Visual Computing and Games) (B.Sc. only)**

As a component of the Degree Regulations for the General Degree of Bachelor of Science a student must complete the following courses:

1. Forty-five credit hours in Computer Science courses are required for a major in Computer Science (Visual Computing and Games):
  - a) Computer Science ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008;
  - b) Computer Science 3300, 3301, and 4300;
  - c) Six additional credit hours in Computer Science courses selected from Computer Science 2300, 4301, 4302, 4303, 4304; and
  - d) Three additional credit hours in Computer Science courses selected from those listed in c. above, or Computer Science 2100, 4766, 4768.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.”

Department of Computer Science (cont'd)

Page 478, 2018-2019 Calendar, under the heading 11.4.4 Honours in Computer Science, amend the section as follows:

**“11.4.4 Honours in Computer Science**

See Bachelor of Arts (Honours) Degree Regulations or Degree Regulations for the Honours Degree of Bachelor of Science (as appropriate).

1. Sixty-three credit hours in Computer Science courses are required for the Honours Degree in Computer Science, including:
  - a) Computer Science ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, and 4780.
  - b) Fifteen additional credit hours in Computer Science at the 4000 level.
  - c) Eighteen additional credit hours in Computer Science courses at the 3000 level or beyond.
2. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: Students are encouraged to take Mathematics 3000 and Statistics 2560.”

Page 478, 2018-2019 Calendar, under the heading 11.4.5 Honours in Computer Science (Software Engineering) (B.Sc. only), amend the section as follows:

**“11.4.5 Honours in Computer Science (Software Engineering) (B.Sc. Only)**

Completion of the Honours in Computer Science (Software Engineering) Program does not qualify persons to hold the designation "Professional Engineer" as defined by various Provincial Acts governing the Engineering Profession.

1. See Degree Regulations for the Honours Degree of Bachelor of Science.
2. Sixty-three credit hours in Computer Science courses are required for the Honours Degree in Computer Science (Software Engineering), including:

Department of Computer Science (cont'd)

- a) Computer Science ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 4770, 4780.
  - b) Nine additional credit hours in Computer Science chosen from 4718, 4721, 4723, 4751, 4753, 4756, 4759, 4766, and 4768.
  - c) Nine additional credit hours in Computer Science at the 4000 level.
  - d) Twelve additional credit hours in Computer Science at the 3000 level or beyond.
3. Additional courses required are: Mathematics 1000, 1001, 2000, 2050, and Statistics 1510 or 2550.

Note: The Honours project (4780) must be in the area of Software Engineering.”

Page 458, 2018-2019 Calendar, under the heading 10.1.1 Applied Mathematics and Computer Science Joint Major, amend the section as follows:

**“10.1.1 Applied Mathematics and Computer Science Joint Major**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science ~~4000~~, 1001, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, plus 18 further credit hours in Computer Science courses numbered 3000 or higher.
2. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3100, 3132, 3161, 3202, 4160, and 4190.

In addition, Statistics 2550 is highly recommended.”

Page 458, 2018-2019 Calendar, under the heading 10.1.4 Computer Science and Economics Joint Major, amend the section as follows:

**“10.1.4 Computer Science and Economics Joint Major**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

**1. Computer Science Requirements**

Forty-two credit hours in Computer Science courses are required:  
~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007,

Department of Computer Science (cont'd)

2008, 2500, 3731, 3753 plus 6 further credit hours in Computer Science courses numbered 3000 or higher.

**2. Economics requirements**

A total of 42 credit hours in Economics courses are required: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, 3010, and 6 credit hours from either 3550 and 3551, or 4550 and 4551 are obligatory.

The remaining 18 credit hours shall be chosen from among the various Economics courses in consultation with the Head of the Department or delegate, and will include at least 9 credit hours in courses at the 4000 level.

**3. Additional Requirements: Mathematics 1000, 1001, 2000, 2050, and Statistics 2550.”**

Page 458, 2018-2019 Calendar, under the heading 10.1.5 Computer Science and Geography Joint Major, amend the section as follows:

**“10.1.5 Computer Science and Geography Joint Major**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

**1. Computer Science Requirements**

Thirty-nine credit hours in Computer Science courses are required: ~~1000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, 4751 plus 6 further credit hours in Computer Science courses numbered 3000 or higher.

**2. Geography Requirements**

Thirty-nine credit hours in Geography courses are required: 1050, 2001, 2102, 2195, 2302, 2425, 3202, 3222, 3250, 3260, 4202, 4250, 4261.

**3. Additional Requirements: Mathematics 1000, 1001, 2000, 2050, and Statistics 2550.”**

Page 459, 2018-2019 Calendar, under the heading 10.1.6 Computer Science and Physics Joint Major (B.Sc. only), amend the section as follows:

**“10.1.6 Computer Science and Physics Joint Major (B.Sc. only)**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

Department of Computer Science (cont'd)

1. Chemistry 1050 and 1051 (or Chemistry 1010, 1011, and the former 1031).
2. Thirty-nine credit hours in Computer Science are required for the Joint Major: ~~4000~~, 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 3731 plus 9 further credit hours in Computer Science courses numbered 3000 or higher, including at least 3 credit hours at the 4000 level.
3. Physics 1050 (or 1020) and 1051 plus at least 30 additional credit hours in Physics including 2053, 2055, 2750, 2820, 3220, 3400, 3500, 3750, 3800.
4.
  - a. Mathematics 1000 and 1001.
  - b. Mathematics 2000, 2050, 2260, 3202.
  - c. Additional electives to bring the credit hours to 120. Computer Science 2500 and Statistics 2550 are recommended.”

Page 459, 2018-2019 Calendar, under the heading 10.1.7 Computer Science and Pure Mathematics Joint Major, amend the section as follows:

**“10.1.7 Computer Science and Pure Mathematics Joint Major**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science ~~4000~~, 1001, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008.
2. Eighteen additional credit hours in Computer Science courses numbered 3000 or higher.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3202, 3320, 3340, and Statistics 2550.
4. Nine additional credit hours in courses numbered 3000 or higher offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330.”

Page 459, 2018-2019 Calendar, under the heading 10.1.8 Computer Science and Statistics Joint Major, amend the section as follows:

Department of Computer Science (cont'd)

**“10.1.8 Computer Science and Statistics Joint Major**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Computer Science ~~1000~~, 1001, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2500, 4734, plus 15 further credit hours in Computer Science courses numbered 3000 or higher.
2. Statistics 1510 or 2500 or 2550, and 2501 or 2560.
3. Mathematics 1000, 1001, 2000, 2050, 2051, 2320, 3340, Statistics 2410 or 3410, 3411, 3520, 3521, 3540, 4590.
4. Nine further credit hours in Statistics courses numbered 3000 or higher including at least a 3 credit hour course numbered 4000 or higher excluding Statistics 4581.”

Page 508, 2018-2019 Calendar, under the heading 12.4.2 Second Year Courses, amend the section as follows:

**“2100 Social Web Analysis** covers the analysis of social network structures, the flow of data within them and the methods to extract useful information about these networks, their participants and the content of their communication. Security and trust issues are also covered.

PR: COMP ~~1000~~1003

**2300 Introduction to Multimedia Programming** is an introduction to programming and computer science with an emphasis on the development of multimedia applications. The course introduces the fundamental principles of programming, including object-oriented and event-driven programming. Students will develop an understanding of how to use and create classes and methods and combine them with multimedia libraries to produce animations, handle input from keyboard and mouse, and import sounds and videos to produce multimedia applications which can be directly deployed on the Internet.

CR: COMP 1550

LH: 3

PR: COMP ~~1000~~1003

**2008 Social Issues and Professional Practice** covers ethical and social considerations of computing to provide students with the basis to address these issues by ethical and technical actions. Case studies are used to illustrate ethical and social issues of computing.

CH: 1

CR: COMP 2760

PR: COMP ~~1000~~ 1003”



51.22 Department of Earth Sciences

Page 511, 2018-2019 Calendar, under the heading 12.5.1 First Year, amend the section as follows:

**“1002 Concepts and Methods in Earth Sciences** is an introduction to a broad range of concepts concerning the development of the geological record and the Earth; practical methods for collection of field based data; topics in map interpretation and geometric analysis, stratigraphy, paleontology, structure, ~~and~~ petrology, and geophysics. The course is presented with an emphasis on the development of practical skills needed to pursue a career in Earth Sciences.

LH: 3

PR: EASC 1000; Science 1807”

Page 207, 2018-2019 Calendar, under the heading 13.8 Earth Sciences, amend the section as follows:

**“1002 Concepts and Methods in Earth Sciences** is an introduction to a broad range of concepts concerning the development of the geological record and the Earth; practical methods for collection of field based data; topics in map interpretation and geometric analysis, stratigraphy, paleontology, structure, ~~and~~ petrology, and geophysics. The course is presented with an emphasis on the development of practical skills needed to pursue a career in Earth Sciences.

LH: 3

PR: EASC 1000; Science 1807”

Page 514, 2018-2019 Calendar, under the heading 12.5.4 Fourth Year, amend the section as follows:

**“499A and 499B Dissertation** is an independent study ~~of an approved problem in the Earth Sciences. The~~ with the subject of study will be decided in consultation with Faculty Advisors and ~~must be~~ approved in advance by the Head of Department. The first semester will ~~normally~~ involve ~~directed background~~ reading, ~~supervised~~ field and/or laboratory work, ~~and preparation of a dissertation outline, and draft of a first chapter of the thesis.~~ The second semester will be devoted to data synthesis and interpretation, ~~to a~~ mandatory seminar presenting ~~the thesis study results,~~ and ~~to preparation of a formal written thesis report accompanied by appropriate illustrations, to be submitted for grading one week before the end of classes.~~

CH: 6

PR: admission to the Honours program

UL: The dissertation cannot be based on the same study used to obtain credit for EASC 4950. May be used as Science credits by students not in the Honours program with permission of the Head of the Department.”

51.23 Department of Mathematics and Statistics

Page 515, 2018-2019 Calendar, under the heading 12.8.1 Mathematics Courses, amend the section as follows:

**“2320 Discrete Mathematics** covers basic concepts of mathematical reasoning; logic and quantifiers, methods of proof, sets and set operations, functions, and relations including, equivalence relations and partial orders, countable and uncountable sets. ~~as~~ These concepts will be illustrated through the ~~notions of~~ congruence and divisibility of integers, ~~mathematical~~ induction and recursion, principles of counting, permutations, and combinations, ~~and~~ the Binomial Theorem, and elementary probability.

CR: the former Computer Science 2740 or the former Engineering 3422 or Engineering 4424

PR: MATH 1001 or 2050”

Page 217, 2018-2019 Calendar, under the heading 13.21 Mathematics and Statistics, amend the section as follows:

~~“2320 Discrete Mathematics are basic concepts of mathematical reasoning, sets and set operations, functions, relations including equivalence relations and partial orders as illustrated through the notions of congruence and divisibility of integers, mathematical induction, principles of counting, permutations, combinations and the Binomial Theorem.~~ covers basic concepts of mathematical reasoning: logic and quantifiers, methods of proof, sets and set operations, functions and relations, equivalence relations and partial orders, countable and uncountable sets. These concepts will be illustrated through the congruence and divisibility of integers, induction and recursion, principles of counting, permutations and combinations, the Binomial Theorem, and elementary probability.

CR: the former Computer Science 2740 or the former Engineering 3422 or Engineering 4424

PR: MATH 1001 or MATH 2050”

Page 515, 2018-2019 Calendar, under the heading 12.8.1 Mathematics Courses, amend the section as follows:

**“3000 Real Analysis I** covers ~~proof techniques, the~~ structure of the real numbers, sequences ; and limits, compactness, continuity, uniform continuity, differentiation, and the Mean Value Theorem.

CR: the former MATH 2001

LH: 1.5

PR: MATH 2000 and 2320”

Page 458, 2018-2019 Calendar, under the heading 10.1.2 Applied Mathematics and Economics Joint Major, amend the section as follows:

Department of Mathematics and Statistics (cont'd)

**“10.1.2 Applied Mathematics and Economics Joint Major**

(The committee notes that this program needs to be re-examined as 4131 and 4132 are inactive.)

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the following courses are required:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3100, 3202, ~~4132~~, Statistics 2550.
2. Either Mathematics 3132 and 4131 or 3161 and 4160.
3. A computing course early in the program is required. Computer Science 1510 is highly recommended.
4. Economics: 1010 (or the former 2010), 1020 (or the former 2020), 2550, 3000, 3001, 3010, 4550, 4551.
5. Eighteen further credit hours chosen from among the various Economics courses in consultation with the Head of the Department or delegate, including at least 9 credit hours at the 4000 level.”

Page 458, 2018-2019 Calendar, under the heading 10.1.3 Applied Mathematics and Physics Joint Major, amend the section as follows:

**“10.1.3 Applied Mathematics and Physics Joint Major**

Required course for this degree are:

1. Six credit hours in Critical Reading and Writing (CRW) courses including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 is recommended.
3. Six credit hours in science other than Mathematics or Physics (if Computer Science is chosen then Computer Science 1510 may be counted as 3 of these hours).
4. Mathematics 1000, 1001, 2000, 2050, 2051, 2260, 2320, 3000, 3001, 3132, 3202.
- ~~5. At least one of Mathematics 2130 or Mathematics 2320.~~
6. Physics 1050 (or 1020), 1051, 2053, 2055, 2750 (or 2056), 2820, 3220, 3400, 3500, 3750.
7. Mathematics 3161 or Physics 3820.
8. At least 15 additional credit hours chosen from Applied Mathematics and Physics courses numbered 3000 or above. At least 3 hours are required from Applied Mathematics and 6 hours are required from Physics.
9. A writing course. Any one of Mathematics 2130, Physics 3900, Mathematics 419A/B, or Physics 490A/B is acceptable.”

Page 461, 2018-2019 Calendar, under the heading 10.2.1 Applied Mathematics and Chemistry Joint Honours, amend the section as follows:

Department of Mathematics and Statistics (cont'd)

**“10.2.1 Applied Mathematics and Chemistry Joint Honours**

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 is recommended.
3. Biochemistry 2201 or the former 2101, or 2901.
4. Physics 1050 (or 1020) and 1051 (or 1021).
4. Mathematics 1000, 1001, 2000, 2050, 2051, ~~2130~~, 2260, 2320, 3000, 3001, 3132, 3161, 3202, 3210, 4160.
5. Chemistry 1050 and 1051 (or 1200 and 1001), 2100, 2210, 2301, 2302, 2400, 2401, 3110, 3210 or 3211, 3303.
6. Six additional credit hours chosen from courses numbered 3000 or higher that are offered by the Department of Chemistry.
7. An Honours Dissertation (Mathematics 419A/B or Chemistry 490A/B). The topic of the Honours Dissertation must have the prior approval of the Heads of the two Departments. A faculty member of either Department may act as supervisor.
8. A sufficient number of elective courses to bring the degree up to a total of 120 credit hours.
9. Mathematics 2130 is recommended.”

Page 461, 2018-2019 Calendar, under the heading 10.2.2 Applied Mathematics and Physics Joint Honours, amend the section and renumber accordingly:

**“10.2.2 Applied Mathematics and Physics Joint Honours**

The following courses are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. A computing course. Computer Science 1510 or 1001 is recommended.
3. Six credit hours in a science other than Mathematics or Physics (if Computer Science is chosen then Computer Science 1510 may be counted as three of these hours).
4. Mathematics 1000, 1001, 2000, 2050, 2051, 2260, 2320, 3000, 3001, 3132, 3202, 3210.
- ~~5. At least one of Mathematics 2130 or Mathematics 2320.~~
6. Physics 1050 (or 1020), 1051, 2053, 2055, 2750 (or 2056), 2820, 3220, 3230, 3400, 3500, 3750, and one of 3800 or 3900.
7. One of Mathematics 3161 or Physics 3820 and one of Mathematics 4160 or Physics 4820.
8. Physics 490A/B or Mathematics 419A/B.
9. Twelve additional credit hours chosen from courses numbered 4000 or higher that are offered by the Department of Mathematics and Statistics or the Department of Physics and Physical Oceanography.

Department of Mathematics and Statistics (cont'd)

At least 3 credit hours must be selected in each of Applied Mathematics and Physics.

10. Twelve credit hours in applicable elective courses. Mathematics 2130 is recommended.

The topic for the Honours project or thesis, Mathematics 419A/B or Physics 490A/B, must be chosen with the prior approval of both departments.”

Page 483, 2018-2019 Calendar, under the heading 11.8.4 Major in Applied Mathematics (B.Sc. Only), amend the section as follows:

**“11.8.4 Major in Applied Mathematics (B.Sc. Only)**

As a component of the Degree Regulations for the General Degree of Bachelor of Science, a student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2260, 2320, 3000, 3001, 3100, 3132, 3161, 3202, 4160, 4190.
2. Three credit hours in courses numbered 3000 or higher that are offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330.
3. A computing course, early in your program. Computer Science 1510 is highly recommended.
4. A designated technical writing course offered by a Science department. Mathematics 2130 is recommended. The technical writing course is prerequisite to some 3000-level courses.
5. Physics 1050 (or 1020) and 1051.
6. A statistics course. Statistics 2410 or 3410 is recommended.”

Page 483, 2018-2019 Calendar, under the heading 11.8.7 Honours in Applied Mathematics (B.Sc. Only), amend the section as follows:

**“11.8.7 Honours in Applied Mathematics (B.Sc. Only)**

See Degree Regulations for the Honours Degree of Bachelor of Science. A student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2130, 2260, 2320, 3000, 3001, 3100, ~~3111~~, 3132, 3161, 3202, 3210, 4160, 4180, 4190, 419A/B.
2. At least one of Mathematics 4162 or 4170.
3. Statistics 2410 or 3410.
4. Nine further credit hours in courses numbered 3000 or higher that are offered by the Department of Mathematics and Statistics, excluding the former Mathematics 3330, at least 3 of which must be in courses numbered 4000 or higher.
5. A computing course early in the program is required. Computer Science 1510 is recommended.
6. Physics 1050 (or 1020), 1051, 2820, 3220.”

Department of Mathematics and Statistics (cont'd)

Page 484, 2018-2019 Calendar, under the heading 11.8.9 Honours in Statistics, amend the section as follows:

**“11.8.9 Honours in Statistics**

See Degree Regulations for the Honours Degree of Bachelor of Science or Bachelor of Arts (Honours) Degree Regulations (as appropriate). A student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, 2320, 3000, 3001, 3132, 3202, 3210, Statistics 2410 or 3410, 2560, 3411, 3520, 3521, 4410, 4530, 4590, 459A/B.
2. Statistics 2500 or 2550. Statistics 2550 is recommended.
3. Eighteen further credit hours in Statistics courses including at least 12 credit hours in courses numbered 4000 or higher excluding Statistics 4581.
4. A computing course. Computer Science 1510 is recommended.
5. Mathematics 4000 is recommended.”

Page 483, 2018-2019 Calendar, under the heading 11.8.6 Major in Statistics, amend the section as follows:

**“11.8.6 Major in Statistics**

As a component of the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate, a student shall complete the following requirements:

1. Mathematics 1000, 1001, 2000, 2050, 2051, Statistics 2410 or 3410, 2560, 3411, 3520, 3521, 4530.
2. Statistics 2500 or 2550. Statistics 2550 is recommended.
3. Nine further credit hours in Statistics courses numbered 3000 or higher, at least 6 credit hours of which must be in courses numbered 4000 or higher excluding Statistics 4581.
4. A computing course. Computer Science 1510 is recommended.
5. Mathematics 2320, 3000 and 3001 are recommended.”

Page 217, 2018-2019 Calendar, under the heading 11.8.6 Major in Statistics, amend the section as follows:

~~“3000 Real Analysis I is proof techniques, structure of  $\mathbb{R}$ , sequences, limits, continuity, uniform continuity, differentiation.~~  
~~CR: the former MATH 2001~~  
~~LH: 1.5~~  
~~PR: MATH 2000~~

Department of Mathematics and Statistics (cont'd)

3000 Real Analysis I covers the structure of the real numbers, sequences and limits, compactness, continuity, uniform continuity, differentiation, and the Mean Value Theorem.

CR: the former MATH 2001

LH: 1.5

PR: MATH 2000 and 2320”

51.24 Department of Ocean Sciences

Page 519, 2018-2019 Calendar, under the heading 12.9 Ocean Sciences, add the following new course:

**“4400 Deep-Sea Ecology** provides an overview of the physical and chemical environment of the deep sea, including hydrothermal vents and seeps, to explore adaptations in deep-sea organisms and biodiversity in this key oceanic system. The course combines lectures, seminars, discussions and computer-based laboratory tools, such as dive logs from remotely operated vehicles and data from underwater cabled observatories. It introduces students to emerging research, cutting-edge technologies, as well as natural and human impacts in the deep sea.

LH: 3

PR: OCSC 2500 and at least one course in Ocean Sciences at the 3000 or 4000 level

**Abbreviated Course Title:** Deep-Sea Ecology”

Page 485, 2018-2019 Calendar, under the heading 11.9.3.1 Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems), amend the section as follows:

**“11.9.3.1 Admission Requirements for the Major in Ocean Sciences or the Major in Ocean Sciences (Environmental Systems)**

Admission to the Ocean Sciences Major Programs is based on academic standing. To be considered for admission ~~to one of the major programs~~, students must normally have completed 30 credit hours with a minimum of 24 credit hours in Science, and an overall average of at least 65%. ~~The~~ It is recommended that the following courses ~~should have been~~ be completed before admission:

1. Biology 1001 and 1002;
2. Chemistry 1050 and 1051 (or 1200 and 1001);
3. Earth Sciences 1000;
4. six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses;
5. Mathematics 1000 (or equivalent);
6. Ocean Sciences 1000 with a minimum grade of 65%; and
7. Physics 1020 (or 1050) or 3 credit hours in Ocean Sciences courses at the 2000 level.

Department of Ocean Sciences (cont'd)

~~Students who wish to enroll in any of these programs should plan well in advance so that they have appropriate prerequisites. Entry to required courses may be limited and determined by academic performance.~~ Students are advised to consult with the Department at the earliest opportunity to prepare adequately for program admission. Each student ~~registered~~majoring in ~~the Major~~Ocean Sciences will be assigned a ~~faculty~~an advisor who should be consulted on academic issues, including course selection.”

51.25 Department of Psychology

Page 524, 2018-2019 Calendar, under the heading 12.11.2 Majors Courses, amend the section as follows:

“~~3250~~ **3810 Neurobiology of Learning and Memory** examines how organisms adjust their behaviour to regularities in the environment as a result of experience. Experience changes behavior by modifying the nervous system. We will take a multidisciplinary approach, combining information from psychology and neuroscience; to study learning and memory. Students will gain an understanding of sensitization, habituation, and classical and operant conditioning using animal models, with a particular emphasis on the synaptic and molecular changes that occur with learning and memory.  
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience  
CR: the former PSYC 3250”

Page 524, 2018-2019 Calendar, under the heading 12.11.2 Majors Courses, amend the section as follows:

“**3251 Learning** introduces students to topics of learning phenomena and learning theories. Topics to be studied include the evolutionary context of learning, habituation and sensitization, Pavlovian conditioning, operant conditioning, and generalization and discrimination in learning. Applications of learning principles to topics such as child rearing, education, drug use and rehabilitation, as well as to other topics of contemporary interest, will also be discussed.  
PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience  
**Abbreviated Course Title:** Psychology 3251 Learning

**4250 Selected Topics in Learning and Motivation** I an intensive examination of a specific topic in learning and motivation.  
PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience



Department of Psychology (cont'd)

**4251 Selected Topics in Learning and Motivation II** is an intensive examination of a specific topic in learning and motivation.

PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience

**4270 Research Experience in Learning** allows students to gain research experience in selected areas of learning.

PR: PSYC 3251 or the former 3250, and admission to a Major in Psychology or Behavioural Neuroscience

**3840 Neurobiology of Stress** will cover topics including the effects of stress on the immune system, hypothalamic-pituitary-adrenal axis, neurogenesis and neuroplasticity, neurotransmitter and neuropeptide release, cognition and emotional processing, and in utero and early postnatal development. The relationship between stress and mental disorders such as depression, posttraumatic stress disorder, anxiety disorders, schizophrenia, bipolar disorder, substance abuse and addiction, dementia and age-related cognitive decline as well as resilience to stress will be discussed.

PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, and admission to a Major in Psychology or Behavioural Neuroscience

**Abbreviated Course Title:** Psychology 3840 Neurobiology of Stress

**3860 Neuropsychopharmacology** introduces students to the neurochemical and molecular underpinnings of behavior, with special emphasis on the biological principles underlying the etiology, pathophysiology and treatment of mental disorders. As a broad subdiscipline of neuroscience, it is ideal for those seeking to integrate neuroanatomy, neurophysiology, pharmacology and the behavioural sciences. It will provide a thorough understanding and appreciation about how basic and clinical research can be synthesized and used for the development of various forms of therapies.

PR: PSYC 2520 or 2521, 2911 and 2930 or the former 2570, and admission to a Major or Minor in Psychology or a Major in Behavioural Neuroscience.

**Abbreviated Course Title:** Psychology 3860

Neuropsychopharmacology

**2521 Introduction to Neuroscience for Behavioural Neuroscience Majors** is a comprehensive survey of the different domains of behavioural neuroscience, with an emphasis on systems level. It will cover a broad range of topics including the fundamentals of neuroanatomy, neurophysiology, and neurodevelopment, as well as higher level functions such as sleep, emotion, language, consciousness and mental illness. Students will be able to describe the basic mechanisms involved in neural system function and how these affect behaviour and several forms of neuroplasticity.

Department of Psychology (cont'd)

CR: PSYC 2520, 2810, 2825, the former PSYC 3801

UL: This is a required course for Behavioural Neuroscience majors. Students majoring in Psychology should register for PSYC 2520.

LH: one 3-hour laboratory period weekly

PR: Science 1807 and 1808; PSYC 1000 and 1001 and admission to a Major in Behavioural Neuroscience

**Abbreviated Course Title:** Psychology 2521 Intro Neurosci BHNR Majors

**2520 Introduction to Behavioural Neuroscience** is based on the idea that psychological and neuroscience research efforts are synergistic. Neuroscience research can reveal mechanisms that help explain the mind and behavior, while concepts developed by psychological research often define the topics that neuroscience investigates. The course will survey a broad range of topics that include the fundamentals of neuroanatomy, neurophysiology, and neurodevelopment, as well as higher level functions such as motivation, emotion, sleep, memory, language, and mental illness.

CR: PSYC 2521, 2810, 2825, the former PSYC 3801

UL: Students majoring in Behavioural Neuroscience should register for PSYC 2521.

PR: PSYC 1000 and 1001 and admission to a Major in Psychology or Behavioural Neuroscience; minors may be permitted to take this course if space permits

**3800 Cellular and Molecular Neuroscience** addresses the structure and function of neurons and neural circuits and examines principles of electrochemical neural communication at the macroscopic, microscopic and molecular level. The relevance of this knowledge to understanding brain mechanisms of normal and diseased brain functions will be touched upon. The molecular basis of the formation of some types of memories will be explored.

PR: Science 1807 and 1808; PSYC 2520 or 2521, 2911, and 2930 or the former 2570, Biology 1001 and 1002, and admission to a Major in Psychology or Behavioural Neuroscience

LH: one laboratory period weekly

**4852 Selected Topics in Behavioural Neuroscience (Neurobiology of Time and Space)** will examine selected topics in timing, circadian rhythms, spatial learning and navigation.

PR: One of the former PSYC 3250, 3800, the former 3801, 3810, 3820, 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience

**Abbreviated Course Title:** Sel Tpcs Neurobiol Time Space

Department of Psychology (cont'd)

**4853 Selected Topics in Behavioural Neuroscience (Neurobiology of Sex)** will examine the development of sex differences in the brain and behaviour by considering both animal models and human studies.

PR: One of the former PSYC 3250, 3800, the former 3801, 3810, 3820, 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience

**Abbreviated Course Title:** Sel Tpcs Neurobiol Sex

**4854 Selected Topics in Behavioural Neuroscience (Neurobiological Diseases and Disorders)** will examine the neurobiology of neurodegenerative diseases/psychological disorders, and the potential of therapeutic interventions.

PR: One of the former PSYC 3250, 3800, the former 3801, 3810, 3820, 3830, 3840, or 3860 and admission to a Major in Psychology or Behavioural Neuroscience

**Abbreviated Course Title:** Sel Tpcs Neurobiol Diseases

Page 489, 2018-2019 Calendar, under the heading 11.11.3 Requirements for a Major in Psychology, amend the section as follows:

**“11.11.3 Requirements for a Major in Psychology**

Students completing this program cannot receive credit for Psychology 2920. Students who intend to pursue graduate studies should take courses leading to the Honours degree.

1. Students may Major in Psychology as part of either a B.A. or a B.Sc. program, and should consult the Degree Regulations for the General Degree of Bachelor of Science or the Degree Regulations for the General Degree of Bachelor of Arts, as appropriate. All Majors are required to complete a minimum of 42 credit hours of Psychology as listed below:
  - a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930.
  - b. Twelve credit hours in Psychology chosen from the following: 3050, 3100, the former 3250, 3251, 3350, 3450, 3620, 3650, 3750, or one of 3800, 3810, 3820, ~~or~~ 3830, 3840, or 3860.
  - c. Twelve credit hours of 4000-level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
2. Psychology Majors following the B.Sc. program are also required to complete the following:
  - a. Mathematics 1000 (or equivalent).
  - b. Biology 1001 and 1002.
  - c. Either Chemistry 1010 and 1011 (or 1050 and 1051); OR Physics 1020 (or 1050) and 1021 (or 1051).

Department of Psychology (cont'd)

**Note:**

*First year students should think carefully about whether Chemistry or Physics best suits their future program needs. Students should examine the prerequisites for upper-level science courses and attempt to take them in their first year.*

d. Six credit hours of laboratory courses at the 2000 level or above in one of Biology, Chemistry, or Physics.

**Note:**

*Biology/Psychology 3750 and 4701 and Biology 3053 cannot be used to satisfy the requirement of 6 laboratory credit hours at the 2000 level or above in either Biology, Chemistry, or Physics.*

3. Psychology Majors following the B.A. program are also required to complete Mathematics 1000 or two of 1090, 1050, 1051 (or equivalent), and are encouraged to complete at least 6 credit hours in Biology.”

Page 490, 2018-2019 Calendar, under the heading 11.11.4 Requirements for Honours in Psychology, amend the section as follows:

**“11.11.4 Requirements for Honours in Psychology**

Students completing this program cannot receive credit for Psychology 2920.

1. Honours students in Psychology should consult Degree Regulations for the Honours Degree of Bachelor of Science or Bachelor of Arts (Honours) Degree Regulations as appropriate. All Honours students are required to complete the 60 credit hours of Psychology as listed below:
  - a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930, 3900, 4910, 499A/B
  - b. Eighteen credit hours chosen from the alternatives listed in Clause 1. b. of the requirements for a Major in Psychology
  - c. Twelve credit hours of 4000-level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
2. Honours students must also complete the requirements listed in either Clause 2. or Clause 3., as applicable, of the requirements for a Major in Psychology.
3. Honours students will be required to submit in their graduating year, an undergraduate thesis (Psychology 499A/B) which demonstrates their competence in Experimental Psychology.”

Page 490, 2018-2019 Calendar, under the heading 11.11.5 Requirements for a Major in Behavioural Neuroscience (B.Sc. Only), amend the section as follows:

Department of Psychology (cont'd)

**“11.11.5 Requirements for a Major in Behavioural Neuroscience (B.Sc. Only)**

Students completing this program cannot receive credit for Psychology 2920.

A program is offered in the Psychology Department to provide an education in Behavioural Neuroscience. Students planning to enroll in the program are advised to consult with the Head of the Department at the earliest opportunity because certain course choices may restrict later options. Students who intend to pursue graduate studies should take courses leading to the Honours degree.

As a component of the Degree Regulations for the General Degree of Bachelor of Science, the program for a Major in Behavioural Neuroscience shall include:

1.
  - a. Psychology 1000, 1001, ~~2520, 2521~~, 2910, 2911, 2930, ~~3250~~, 3800, 3820 and one of 3810, 3830, 3840, or 3860.
  - b. Three credit hours in Psychology chosen from the following: 3050, 3100, the former 3250, 3251, 3350, 3450, 3620, 3650, 3750.
  - c. Any research experience course and one of Psychology 4250, 4251, 4850 or 4851; or, any selected topics course and one of Psychology 4270 or 4870.
2.
  - a. Mathematics 1000 (or equivalent) and 1001.
  - b. Chemistry 1050 and 1051 (or 1200 and 1001).
  - c. Physics 1020 (or 1050) and 1021 (or 1051).
  - d. Biology 1001 and 1002.
  - e. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
3. Eighteen credit hours from the following courses chosen from at least two different sciences:
  - a. Biochemistry: Any 2000-, 3000-, or 4000-level course except the former 2000, 2005, the former 2010, the former 2011, 3202, 3402, or 4502.
  - b. Biology: ~~2060, 2122, 2210, 2250, 2900, 3050, 3160, 3202, 3295, 3401, 3500, 3530, 3540, 3750, 4200, 4241, 4245, 4250, 4402, the former 4450, 4601, 4605, 4701, the former 4900 (see note below).~~ Any 2000-, 3000-, or 4000-level course except 2040, 2041, 2120, 3053, or 3820.
  - c. Chemistry: 2100, 2210, 2301 (or the former Chemistry 2300), 2400, 2401, or any 3000 or 4000 level course.
  - d. Computer Science: Any 2000, 3000, or 4000 level course except the former 2650 and the former 2801.
  - e. Ocean Sciences: any 2000-, 3000-, or 4000-level course
  - e-f. Mathematics: 2000, 2050, 2051, 2320, 3000, 3001 or any 3000 or 4000 level pure or applied mathematics course.

Department of Psychology (cont'd)

~~f.g.~~ Medicine 310 A/B

~~g.h.~~ Physics: Any 2000, 3000, or 4000 level course except 2151, 3150, 3151.

**Notes:**

1. Credit may not be obtained for both Biology 3750 and Psychology 3750 or for both Biology 4701 and Psychology 4701.
2. The courses listed under Clause 3 may have prerequisites. It is the student's responsibility to ensure that all prerequisites have been met, or that waivers have been obtained, before registering for these courses."

Page 490, 2018-2019 Calendar, under the heading 11.11.6 Requirements for Honours in Behavioural Neuroscience (B.Sc. Only), amend the section as follows:

**"11.11.6 Requirements for Honours in Behavioural Neuroscience (B.Sc. Only)**

Students in Behavioural Neuroscience should consult Degree Regulations for the Honours Degree of Bachelor of Science. Students completing this program cannot receive credit for Psychology 2920.

1. Honours students in Behavioural Neuroscience are required to complete the following Psychology courses:

a. Psychology1000, 1001, ~~2520,~~ 2521, 2910, 2911, 2930, ~~3250~~, 3800, 3820, one of the former 3250, 3810, 3830, 3840, or 3860, 3900, 499A/B,

b. ~~One~~ One further course in Psychology chosen from the following: 3050, 3100, ~~3251~~, 3350, 3450, 3620, 3650, 3750;

c. ~~Any~~ Any research experience course and one of Psychology ~~4250~~, ~~4251~~, 4850, ~~or~~ 4851, 4852, 4853, or 4854; or, any selected topics course and ~~one of~~ Psychology ~~4270 or~~ 4870.

~~1.2.~~ 2. Honours students in Behavioural Neuroscience must also complete the requirements listed in Clauses 2. and 3. of the requirements for a Major in Behavioural Neuroscience.

~~2.3.~~ 2. In accordance with Academic Standing under the Degree Regulations for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of "B" or better, or an average of 75% or higher in all the required courses listed in Clauses 1. and 3. of the requirements for a major in Behavioural Neuroscience and Clause 1 of the requirements for honours in Behavioural Neuroscience, except those at the 1000 level."

Page 492, 2018-2019 Calendar, under the heading 11.11.9 Suggested Course Sequences, amend the section as follows:

Department of Psychology (cont'd)

**11.11.9 Suggested Course Sequences**

**Table 5 Suggested Course Sequence for B.Sc. in Behavioural Neuroscience  
(Co-operative)**

Term	Suggested Courses
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 1</b></li> </ul>	<ul style="list-style-type: none"> <li>• Biology 1001 or Physics 1020 (1050)*</li> <li>• Chemistry 1050 or (1200)</li> <li>• Critical Reading and Writing requirement</li> <li>• Mathematics 1090 or Mathematics 1000</li> <li>• Psychology 1000</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 2</b></li> </ul>	<ul style="list-style-type: none"> <li>• Biology 1002 or Physics 1021 (1051)</li> <li>• Chemistry 1051 or (1001)</li> <li>• Critical Reading and Writing requirement</li> <li>• Mathematics 1000 or Mathematics 1001</li> <li>• Psychology 1001</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 3</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 1**</li> <li>• Elective or Science requirement</li> <li>• Physics 1020 (1050)* or Biology 1001</li> <li>• Psychology <del>2520</del>2521 or 2930</li> <li>• Psychology 2910</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 4</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 2</li> <li>• Physics 1021 (1051) or Biology 1002</li> <li>• Mathematics 1001 or Elective or Science requirement</li> <li>• Psychology 2911</li> <li>• Psychology 2930 or <del>2520</del>2521</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Spring</b></li> <li>• <b>Work Term 1</b></li> </ul>	Psychology 199W
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 5</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 3</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Psychology <del>3250</del>3810, 3830, 3840, or 3860</li> <li>• Psychology 3800</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 6</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 4</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Psychology 3000-Level Core</li> <li>• Psychology 3820</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Spring</b></li> <li>• <b>Work Term 2</b></li> </ul>	Psychology 299W
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 7</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 5</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Psychology Research Experience course</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Work Term 3</b></li> </ul>	Psychology 399W
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 8</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 6</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Psychology Selected Topics course</li> </ul>
<ul style="list-style-type: none"> <li>• *Students registered in Physics 1050 must also be registered in Mathematics 1000 (not 1090).</li> <li>• **BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only).</li> </ul>	

**Table 6 Suggested Course Sequence for B.Sc. (Honours) in Behavioural Neuroscience (Co-operative)**

Term	Suggested Courses
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 1</b></li> </ul>	<ul style="list-style-type: none"> <li>• Biology 1001 or Physics 1020 (1050)*</li> <li>• Chemistry 1050 or (1200)</li> <li>• Critical Reading and Writing requirement</li> <li>• Mathematics 1090 or 1000</li> <li>• Psychology 1000</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 2</b></li> </ul>	<ul style="list-style-type: none"> <li>• Biology 1002 or Physics 1021 (1051)</li> <li>• Chemistry 1051 or (1001)</li> <li>• Critical Reading and Writing requirement</li> <li>• Mathematics 1000 or 1001</li> <li>• Psychology 1001</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 3</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 1**</li> <li>• Elective or Science requirement</li> <li>• Physics 1020 (1050)* or Biology 1001</li> <li>• Psychology <del>2520</del><u>2521</u> or 2930</li> <li>• Psychology 2910</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 4</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 2</li> <li>• Mathematics 1001 or Elective or Science requirement</li> <li>• Physics 1021 (1051) or Biology 1002</li> <li>• Psychology 2911</li> <li>• Psychology 2930 or <del>2520</del><u>2521</u></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Spring</b></li> <li>• <b>Work Term 1</b></li> </ul>	Psychology 199W
<ul style="list-style-type: none"> <li>• <b>Fall</b></li> <li>• <b>Semester 5</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 3</li> <li>• Elective or Science requirement</li> <li>• Psychology <del>3810, 3830, 3840, or 3860</del><u>3250</u></li> <li>• Psychology 3800</li> <li>• Psychology 3900</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Winter</b></li> <li>• <b>Semester 6</b></li> </ul>	<ul style="list-style-type: none"> <li>• BHNR Requirement 4</li> <li>• Elective or Science requirement</li> <li>• Elective or Science requirement</li> <li>• Psychology 3000-level core</li> </ul>



	<ul style="list-style-type: none"> <li>Psychology 3820</li> </ul>
<ul style="list-style-type: none"> <li>Spring</li> <li>Work Term 2</li> </ul>	Psychology 299W
<ul style="list-style-type: none"> <li>Fall</li> <li>Semester 7</li> </ul>	<ul style="list-style-type: none"> <li>BHNR Requirement 5</li> <li>Elective or Science requirement</li> <li>Elective or Science requirement</li> <li>Psychology Research Experience course</li> <li>Psychology 499A</li> </ul>
<ul style="list-style-type: none"> <li>Winter</li> <li>Work Term 3</li> </ul>	Psychology 399W
Spring (Optional)	Psychology 499A
<ul style="list-style-type: none"> <li>Fall</li> <li>Semester 8</li> </ul>	<ul style="list-style-type: none"> <li>BHNR Requirement 6</li> <li>Elective or Science requirement</li> <li>Elective or Science requirement</li> <li>Psychology Selected Topics course</li> <li>Psychology 499B</li> </ul>
<ul style="list-style-type: none"> <li>*Students registered in Physics 1050 must also be registered in Mathematics 1000 (not 1090).</li> <li>**BHNR Requirement 1-6 specified in clause 3, Requirements for a Major in Behavioural Neuroscience (B.Sc. Only).</li> </ul>	

Page 463, 2018-2019 Calendar, under the heading 10.2.6 Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours, amend the section as follows:

**“10.2.6 Biochemistry and Psychology (Behavioural Neuroscience) Joint Honours**

***Note:***

*Students completing this program cannot receive credit for Psychology 2920.*

The following courses (or equivalent) are required to complete the 120 credit hours in courses required for the degree:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Chemistry 1050 and 1051 (or 1200 and 1001), Biology 1001 and 1002, Mathematics 1000 and 1001, Physics 1050, (or 1020), 1051 (or 1021);
3. Biochemistry 2200 (or 2100), 2201, 2901, 3105, 3206;
4. Either Biochemistry 3108 and 3207, or Medicine 310A/B;
5. 9 credit hours to be selected from Biochemistry 3906 or 3907, 4002, 4101, 4102, 4103, 4104, 4105, 4200, 4201, 4210 or 4211, 4230, 4231-4239;
6. Psychology 1000, 1001, ~~2520~~2521, 2910, 2911, 2930, one of the former 3250, 3810, 3830, 3840, or 3860, 3800, 3820, 3900, one further course in Psychology chosen from the following: 3050, 3100,

Department of Psychology (cont'd)

3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology ~~4250, 4251~~, 4850, ~~or~~ 4851, 4852, 4853, or 4854; or, any selected topics course and ~~one of~~ Psychology ~~4270 or~~ 4870;

7. Either Biochemistry 499A/B or Psychology 499A/B; and
8. Chemistry 2301, 2400, 2401.

**Notes:**

1. *As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of "B" or better, or an average of 75% or higher in all the required courses listed in Clauses 3., 4., 5., 6. and 7. above, except those at the 1000 level.*
2. *Students in first year intending to follow this program should note the regulations for admission to Major programs in Psychology and that the deadline for submission of a completed application form to the Department of Psychology is June 1 for the Fall semester.*

Page 463, 2018-2019 Calendar, under the heading 10.2.7 Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours, amend the section as follows:

**“10.2.7 Biochemistry (Nutrition) and Psychology (Behavioural Neuroscience) Joint Honours**

**Note:**

*Students completing this program cannot receive credit for Psychology 2920.*

The following courses (or equivalent) are required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
2. Chemistry 1050 and 1051 (or 1200 and 1001), Biology 1001 and 1002, Mathematics 1000, Physics 1020 or 1050, and 1021 (or 1051).
3. Biochemistry 2200 (or 2100), 2201, 2600, 2901, 3203, 3206, 3906, Medicine 310A/B, 4300, 4301, 4502, one course chosen from: Biochemistry 3052, 3108, 3402, 3600, 4002, 4105, 4200, 4230, 4240, 4241-4249, Biology 3050.
4. Psychology 1000, 1001, ~~2520~~2521, 2910, 2911, 2930, one of the former 3250, 3810, 3830, 3840, or 3860, 3800, 3820, 3900, one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology ~~4250, 4251~~, 4850, ~~or~~ 4851, 4852, 4853, or 4854; or, any selected topics course and ~~one of~~ Psychology ~~4270 or~~ 4870.

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5. Either Biochemistry 499A/B or Psychology 499A/B.
6. Chemistry 2400.
7. Other courses to complete at least the prescribed minimum of 120 credit hours in courses for the Joint Honours Degree.

**Notes:**

1. *As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of "B" or better, or an average of 75% or higher in all the required courses listed in Clauses 3., 4. and 5. above, except those at the 1000 level.*
2. *Students in first year intending to follow this program should note the regulations as outlined for admission to Major programs in Psychology and that the deadline for submission of a completed application form to the Department of Psychology is June 1 for the Fall semester."*

Page 464, 2018-2019 Calendar, under the heading 10.2.9 Biology and Psychology Joint Honours, amend the section as follows:

**"10.2.9 Biology and Psychology Joint Honours**

**Note:**

*Students completing this program cannot receive credit for Psychology 2920.*

The following courses (or equivalent) are required:

1. Biology 1001, 1002, 2060, 2250, 2600, 2900; one of 3401, 3402, 4245, 4404; four Biology electives at the 2000, 3000 or 4000 level not including Biology 499A or 499B.
2. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930, one of the former 3250, 3810, 3830, 3840, or 3860, 3800; 3900, 4910; one of the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650; one further 4000 level Psychology research experience course.
3. Biology or Psychology 3750, 4701, 499A/B.
4. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
5. Mathematics 1000; Chemistry 1050 (or 1200), 1051 (or 1001), 2400, and 2401; Physics 1020 (or 1050) and 1021 (or 1051); Biochemistry 2201 or the former 2101 and 3106.
6. Other courses, if necessary, to complete at least 120 credit hours of courses."

Page 464, 2018-2019 Calendar, under the heading 10.2.10 Biology and Psychology (Behavioural Neuroscience) Joint Honours, amend the section as follows:

Department of Psychology (cont'd)

**“10.2.10 Biology and Psychology (Behavioural Neuroscience) Joint Honours**

***Note:***

*Students completing this program cannot receive credit for Psychology 2920.*

The following courses (or equivalent) are required:

1. Biology 1001, 1002, 2060, 2250, 2600, 2900; one of 3401, 3402, 4245, 4404; five Biology electives at the 2000, 3000 or 4000 level not including Biology 499A or 499B.
2. Psychology 1000, 1001, ~~2520~~2521, 2910, 2911, 2930, one of the former 3250, 3810, 3830, 3840, or 3860, 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology ~~4250, 4251~~, 4850, ~~or 4851~~, 4852, 4853, or 4854; or, any selected topics course and ~~one of~~ Psychology ~~4270 or~~ 4870.
3. Biology or Psychology 499A/B.
4. Biochemistry 2201 (or the former 2101), 3106.
5. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
6. Mathematics 1000 and 1001; Physics 1020 (or 1050) and 1021 (or 1051); Chemistry 1050 (or 1200), 1051 (or 1001), 2400, and 2401.
7. Other courses, if necessary, to complete at least 120 credit hours of courses.

***Note:***

*As provided for under the Graduation Requirements for the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of "B" or better, OR average of 75% or higher in all the required courses listed in Clauses 1, 2, 3, and 4 above, except those at the 1000 level.”*

51.26 University Library

Page 22, 2018-2019 Calendar, under the heading 8.13 University Library, amend the section as follows:

**“8.13 University Library**

INTG 1000 Academic Integrity ~~Academic Integrity 100A/B~~, a course offered by the University Library, introduces students to the concept of academic integrity and the important role it plays at Memorial University of Newfoundland. Students complete online modules on a variety of topics including: understanding the meaning of academic integrity and its associated university regulations; how to complete university work with

University Library (cont'd)

academic integrity; and how to avail of supports to ensure academic integrity. Normally, INTG 1000 ~~A/B~~ is completed by week 7 of a student's first semester. This course is mandatory for all undergraduate students new to Memorial University of Newfoundland. Registration in subsequent semesters is dependent upon successful completion of this course. This course is offered only online and has a credit hour value of 0. INTG 1000 is equivalent to the former INTG 100A/B."

Page 57, 2018-2019 Calendar, under the heading 6.12.6.5 Penalties in the Case of Resolution by the Senate Committee on Undergraduate Studies or the Senate Committee on Academic Appeals, amend the section as follows:

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

Additionally, a student who has been found guilty will be required to successfully complete specific modules of INTG 1000 ~~A/B~~, Academic Integrity and submit a written reflective evaluation as assigned. In addition to the Reprimand and INTG 1000 ~~A/B~~, the range of penalties and their determination is:"

51.27 Student Medical Certificate

Documentation was not received for Senate meeting.

52. Report of the Academic Council of the School of Graduate Studies

52.1 Environmental Science

Page 617, 2018-2019 Calendar, under the heading 15.3 Degree Requirements, amend the section as follows:

**"15.3 Degree Requirements**

To the extent that resources permit, individual programs will be developed to suit students' interests and needs. However all programs must be approved by the Board of Studies and by the Dean of Graduate Studies. All **General Regulations** of the School of Graduate Studies shall apply to these degrees.

1. The Master of Environmental Science (M.Env.Sci.) is a multidisciplinary course-based degree, focussed on environmental issues. The Degree program provides for both multidisciplinary

### Environmental Science (cont'd)

courses and for courses focussed on the student's specific area of interest.

2. The Degree program requires completion of 24 credit hours of either **Option A** or **Option B** and a project report. The project report will be evaluated according to procedures outlined in **General Regulations, Theses and Reports**.

#### **Option A**

Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be Environmental Science 6000, Environmental Science 6009, and Environmental Science 6010 and 6 credit hours from Environmental Science 6001, 6002, and 6003. Students will also be required to take a minimum of 9 credit hours in elective courses approved by the Board of Studies, 6 credit hours of which will normally be selected from graduate courses offered by the Faculty of Science and the Faculty of Engineering and Applied Science. Students are advised to consult with instructors and Faculties regarding necessary prerequisites and availability.

#### **Option B**

Admission into Option B is limited, competitive and selective. Students may be requested to participate in an interview as part of the selection process. The application deadline for admission to Option B is October 15<sup>th</sup>.

Students will be required to take a minimum of 15 credit hours in program courses, 9 credit hours of which must be Environmental Science 6000, Environmental Science 6009, and Environmental Science 6010 and 6 credit hours from Environmental Science 6001, 6002, and 6003. Students will also be required to take a minimum of 6 credit hours in elective courses approved by the Board of Studies, normally selected from graduate courses offered by the Faculty of Science and Faculty of Engineering and Applied Science. In addition, students will be required to complete the 3 credit hours course Environmental Science 601W (work term).

Environmental Science 601W is a work term of one semester duration. The work term is a full-time period of employment, normally paid and normally in the spring semester. Students are ultimately responsible for securing work term placements. Academic Staff Members in Co-operative Education, in consultation with the Program Chair and the student's Supervisor, provide support for the job search and inform students of potential opportunities. Work terms must be approved by the Academic Staff Members in Co-operative Education before the start of the term.

Work term evaluations consist of two components:

- i. On-the-job Student Performance: job performance shall be assessed by the Academic Staff Members in Co-operative

Environmental Science (cont'd)

Education using information gathered during the work term and input from the employer toward the end of the work term. Evaluation of the job performance will result in one of the following classifications: PASS WITH DISTINCTION, PASS, or FAIL.

- ii. Assignment(s): students are required to submit one or more assignments to the Academic Staff Members in Co-operative Education as outlined in the course syllabus. Evaluation of the assignment(s) will result in one of the following classifications: PASS WITH DISTINCTION, PASS, or FAIL.

Overall evaluation of the work term will result in one of the following final grades being awarded: PASS WITH DISTINCTION indicates the student received a grade of pass with distinction on both the on-the-job performance and the assignment(s).

PASS indicates the student received a grade of PASS on both the on-the-job performance and the assignment(s) or a grade of PASS on one component and PASS WITH DISTINCTION on the other component.

FAIL indicates the student receive a grade of FAIL on either one or both of the on-the-job performance and assignment(s).

~~Work term placements are arranged by Co-operative Education in consultation with the Program Chair and the student's Supervisor. The on-site employment supervisor and Co-operative Education evaluate the work term based on the student's performance on the job and on a written work term report submitted by the student. The topic of the work term report must be related to the work experience and will be chosen by the student in consultation with the on-site employment supervisor and Co-operative Education. The student will be permitted to submit a work term report only after the on-site employment supervisor and Co-operative Education determine that the work term has been successfully completed. The work term report may become the basis for the project report for Environmental Science 6009 (Project) which is required for the M.Env.Sci. Degree. The Program Chair, on the advice of Co-operative Education with input from the on-site employment supervisor, will recommend to the Dean of Graduate Studies a grade of Pass with Distinction, Pass, or Fail. In cases where Co-operative Education and the on-site employment supervisor are unable to reach agreement concerning the grade, the final decision lies with the Program Chair. Should a student fail to complete a work term successfully, the graduate student's M.Env.Sci. Supervisor and the Program Chair may submit to Co-operative Education a proposal for a different work term placement (only once), or the student may apply to the Board of~~

Environmental Science (cont'd)

~~Studies for a change to the course-based M.Env.Sci. Option A, or to the thesis-based M.Sc. (Environmental Science)."~~

52.2 Aquaculture

Page 638, 2018-2019 Calendar, under the heading 25.5 Aquaculture, amend the section as follows:

**"25.5 Sustainable Aquaculture**

- [www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)
- [www.mun.ca/science](http://www.mun.ca/science)

The program of study leading to the Master of Science in Sustainable Aquaculture is designed to instruct students in research using scientific principles derived from a wide range of disciplines including Behaviour, Biochemistry, Biology, Ecology, Food Science, Genomics, Nutrition, and Physiology. It is an interdisciplinary program and often involves several fields of study. Research ~~problems~~ projects may include field and/or laboratory studies of one or more species of marine or freshwater flora and/or fauna. The Aquaculture group consists of faculty members from the Fisheries and Marine Institute of Memorial University of Newfoundland and the Departments of Biology, Biochemistry, and Ocean Sciences of Memorial University of Newfoundland. Research scientists at other institutions, e.g., Fisheries and Oceans Canada, complement the group in offering advice, facilities, and expertise to students in the program.

The Sustainable Aquaculture Administrative Committee is responsible for the program. This Committee is composed of seven members appointed by the Dean of Science including two to three members from the Department of Ocean Sciences, two to three members from the Fisheries and Marine Institute of Memorial University of Newfoundland, and two members from appropriate academic units at Memorial University of Newfoundland. In addition, the Heads of the Departments of Biochemistry, Biology, and Ocean Sciences, and the Head of the School of Fisheries of the Fisheries and Marine Institute of Memorial University of Newfoundland are ex-officio members. The Committee makes recommendations to the Dean of the School of Graduate Studies concerning the academic requirements of the program: admission, course programs of individual students, financial support, composition of supervisory committees, and theses examiners. The Chair of the Committee will also ensure that a supervisory report form for each student in the program is submitted annually to the Dean.



## Aquaculture (cont'd)

### **25.5.1 Qualifications for Admission**

To be considered for admission to the Master of Science in Sustainable Aquaculture, an applicant shall normally hold one of the following: at least a second class Honours degree, or an equivalent both in achievement and depth of study, from an institution recognized by the Senate, or successful completion of the Advanced Diploma in Sustainable Aquaculture offered by the Fisheries and Marine Institute of Memorial University of Newfoundland, with academic standing deemed appropriate by the Committee.

### **25.5.2 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~~ complete 6 credit hours in graduate courses which will normally include at least one of the following: AQUA 6000 - Shellfish Culture and Enhancement, AQUA 6100 - Finfish Aquaculture, or AQUA 6200 - Aquaculture and the Environment.
3. Candidates who do not hold the Advanced Diploma in Sustainable Aquaculture may be required to successfully complete a selection of its component courses.
4. Further courses may be required depending on the background of the individual student.
5. Before the thesis is submitted, the student shall present an open seminar on the topic of investigation to the appropriate academic units, as recommended by the Administrative Committee. Any serious deficiencies in the thesis noticed at this stage should be carefully considered, in consultation with the Supervisor, for rectification.
6. The student will be required to comply with all other regulations governing the graduate Degree of Master of Science.

### **25.5.3 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.

- **Aquaculture**
- 6000 - Shellfish Culture and Enhancement
- 6100 - Finfish Aquaculture
- 6200 - Aquaculture and the Environment

Aquaculture (cont'd)

- 6201-6209 - Special Topics in Aquaculture (*prerequisite: Permission of Chair of Program*)
- **Biochemistry**
- ~~BIOC 6670 - Biological Waste Treatment~~
- 6630 – Marine Biochemistry
- **Biology**
- 6000 - Research Topics in Microbiology
- 6710 - Marine Benthic Biology
- 7101 - Topics in Marine Biology
- 7220 - Quantitative Methods in Biology
- ~~7933 - Advanced Topics in Marine Invertebrates~~
- ~~7938 - Genomics~~
- ~~7531 - Biological Oceanography~~
- ~~7535 - Research Methods in Marine Science~~
- ~~7550 - Fishery Biology~~
- 7551 - Fisheries Resource Management
- ~~7560 - Physiology of Marine Invertebrates~~
- ~~7561 - Physiology of Marine Vertebrates~~
- ~~7570 - Marine Benthic Biology~~
- ~~7910 - Community and Ecosystem Ecology~~
- **Cognitive and Behavioural Ecology**
- 6351 - Behavioural Ecology and Sociobiology
- **Engineering**
- 9603 - Environmental Sampling and Pollutant Analysis (*cross-listed as Environmental Science 6005*)
- 9605 - Advanced Waste Water Treatment
- 9622 - Environmental Statistics
- **Environmental Science**
- 6000 - Environmental Science and Technology
- 6001 - Earth and Ocean Systems
- 6002 - Environmental Chemistry and Toxicology
- 6003 - Applied Ecology
- 6007 - Environmental Risk Assessment (*same as Engineering 9609*)
- **Geography**
- 6250 - Conservation of Natural Resources
- 6410 - Climatology
- **Marine Studies (Fisheries Resource Management) Program Courses**
- 6001 - Fisheries Ecology
- 6005 - Overview of World Fisheries
- 6009 - Current Issues for Sustainable Fisheries
- **Ocean Sciences**
- **7100 - Biological Oceanography**
- **7200 - Adaptations to the Marine Environment**
- **7300 - Plankton Dynamics**

Aquaculture (cont'd)

- **7400 - Fisheries Resource Management**
- **7500 – Immunology and Diseases of Aquatic Organisms**
- **Physics**
- 6316 - Ocean Measurements and Data Analysis
- 6320 - Turbulence
- **Technology Management (Aquaculture Technology Option)**
- **Program Courses**
- 6056 - Management of International Development
- 6071 - Management of Aquaculture Technology
- 6072 - Animal Husbandry Management
- 6073 - Aquaculture Environmental Management
- 6074 - Aquaculture Site and Operational Assessment
- 6075 - Aquaculture Engineering Technology Management

***Note:***

*Consult the Program for a list of titles and information regarding availability.”*

52.3 Social Work

Page 664, 2018-2019 Calendar, under the heading 32 Regulations Governing the Degree of Master of Social Work, amend the section as follows:

“**32 Regulations Governing the Degree of Master of Social Work**

~~4.~~• [www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)

~~2.~~• [www.mun.ca/socwrk](http://www.mun.ca/socwrk)

The degrees of Master of Social Work and Doctor of Philosophy are offered in social work.

The Master of Social Work (M.S.W.) may be completed by part-time or full-time study. All program components, ~~with the exception of on-campus institutes,~~ are offered online except on-campus institutes and field practicum-

The focus of the M.S.W. program is creative approaches to critical thinking for leadership in diverse social work practice. The program allows professionally qualified social workers holding the Degree of B.S.W. or an equivalent professional undergraduate degree in Social Work to undertake intensive advanced work in a specialized area of social work knowledge and practice.

The program is designed to be accessible to students in remote and rural areas, and ~~assumes-requires~~ that: (1) students ~~will~~ have a computer and Internet access; and (2) can travel to St. John’s for the institute portion of

### Social Work (cont'd)

~~the~~ three practice courses. Students ~~will be expected to~~ may incur charges for Internet services, long distance telephone charges, and travel and accommodation expenses.

Entrance into all courses and the offering of any course in an academic year is by approval of the School, consistent with the student's program. Students are admitted only into a designated program of studies.

The School of Social Work may deliver special offerings of the M.S.W. and/or other programs of the School to identified groups of out-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 M.S.W. Program Committee of the School of Social Work, students admitted to an out-of-province program offering may apply to transfer to the equivalent program on the St. John's campus. In such instances, the fee structure under which the student was admitted will not change. Subject to approval by the M.S.W. Program Committee of the School of Social Work, students admitted to a St. John's based program may apply to transfer to the equivalent out-of-province program. In these instances, students transferring from the St. John's based program offerings to an equivalent out-of-province offering will be required to pay a pro-rated one-time fee upon formal transfer to the special offering.

### **32.1 Qualifications for Admission**

~~b-1.~~ 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.

~~e-2.~~ 2. To be considered for admission, an applicant shall hold a Bachelor of Social Work (B.S.W.) degree (or an equivalent professional undergraduate degree in social work approved by the M.S.W. Program Committee of the School of Social Work) from an institution recognized by the Senate, with at least second class standing, and an average of at least 70% in the last 60 undergraduate credit hours.

~~d-3.~~ 3. In addition to the stated academic requirements, the applicant must have completed, subsequent to obtaining the B.S.W. degree, at least two

### Social Work (cont'd)

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.

~~e.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.

~~f.5.~~ For an additional ten percent of seats per year, priority is given to applicants from other equity-seeking groups, based on ~~a person's~~ sexual orientation, gender identity, race, ethnicity, disability and/or being disadvantaged by their economic position/background and who meet the minimum criteria for admission. When the number of eligible applicants wishing to be considered under this clause exceeds the number of seats available, priority will normally be given to bona fide residents of Newfoundland and Labrador (see **Qualifications for Admission**). Applicants wishing to be considered under this clause shall complete the Educational Equity section of the Supplementary Information form at the time of application.

~~g.6.~~ Notwithstanding the above, and in keeping with the School's commitment to achieving equitable representation in the student body, the M.S.W. Program Committee of the School of Social Work, at its discretion, may give preference to additional applicants of ~~First Nations~~/Aboriginal ancestry and/or members of other equity-seeking groups who meet the minimum criteria for admission.

~~h.7.~~ Notwithstanding 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**).

~~i.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.

### **32.2 Procedure for Admission**

~~a.1.~~ Applicants must submit an application for admission with supporting documentation to the School of Graduate Studies, which approves recommendations for admission made by the M.S.W. Program Committee of the School of Social Work. The supporting documentation will consist of: an official transcript of the applicant's previous academic record submitted directly from the institution(s) attended; a statement of

### Social Work (cont'd)

previous professional employment; a list of any published or unpublished works; a declaration of program emphasis and educational objectives; and two letters of appraisal, to be submitted by two referees, one assessing the applicant's previous academic performance and one assessing the applicants previous practice performance. Letters of appraisal are to be submitted directly to the School of Graduate Studies by the referees.

#### **Note:**

*Independent of admission to the program, ~~agencies providing the mandatory a~~ field practicum ~~agency~~ may ~~have a range of additional requirements such as a~~ Criminal Record Check, Vulnerable Sector Check, Child Protection Records Check, ~~or~~ Health Check, etc.*

~~e-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.~~

~~e-3.~~ The M.S.W. Program Committee of the School of Social Work may require the applicant to be interviewed by one or more faculty members of the M.S.W. Program Admissions Subcommittee.

~~e-4.~~ A person who meets the basic admission requirements under **Qualifications for Admission**, may, space permitting, take SCWK 6012 without being admitted to the M.S.W. program. Persons wishing to take a course under this provision must have applied for admission to the M.S.W. program by January 15th of the same year, and been placed on the waitlist. If there are available seats in the course, the applicant will need to submit to the School of Social Work the appropriate form requesting permission to register in a graduate course, and apply or reapply for admission to Memorial University of Newfoundland as an undergraduate.

~~e-5.~~ A person who has completed an M.S.W. degree is eligible to register in any M.S.W. course offering, space permitting.

### **32.3 Plan of Study**

1. A student's plan of study will be developed cooperatively by the student and the M.S.W. Student Services Coordinator.
2. Specified supplementary studies may be required to ensure requisite knowledge pertinent to the requirements for the degree.
3. A student electing a thesis program shall be assigned a Supervisor by the Dean of the School in consultation with the student. It is recommended that a thesis Supervisor be assigned as early in the program as possible. The thesis supervisor, when assigned, shall normally assume the duties of faculty advisor and Pathway mentor.

Social Work (cont'd)

4.

a. Students 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, 6313, 6413, 6917, and at least one of SCWK 6314 or 6315. Course route students must complete a minimum of 27 credit hours consisting of SCWK 6012 ~~(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 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 course route and all thesis route students will register for SCWK 6000 beginning in the Fall of their first year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
- ii. Part-time course route students completing the program in 6 semesters will register for SCWK 6000 beginning in the Fall of their first year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
- iii. Part-time course route students completing the program in 9 semesters will register for SCWK 6000 beginning in the Fall of their second year and in each subsequent semester in which they are actively completing course work in the M.S.W. program.
- iv. By the end of the final week of the first semester in which students are registered in SCWK 6000, they are required to submit the M.S.W. Pathway Learning Contract to their Mentor. ~~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.~~ Progress related to the contract is reviewed by the student and mentor prior to the student enrolling in SCWK 6417. The mentor must approve enrolment in SCWK 6417.
- v. A grade of NC (No Grade Expected) will be awarded in all semesters of ~~the course~~ SCWK 6000 prior to the final Semester. The final grade in this non-credit course will be either Pass or Fail.



Social Work (cont'd)

**32.4 Field Practicum SCWK 6917**

Each M.S.W. student is required to complete a 500 hour field practicum ~~that is to be conducted in a~~ a social work field setting, ~~and~~ supervised by a qualified field instructor, approved by the School of Social Work. Field Instructors must have as a minimum qualification a M.S.W. Degree and a minimum of two years post-M.S.W. social work employment.

Scheduling of a field practicum is flexible. SCWK 6917 Field practica may be ~~offered-completed on a full time or part time basis, may occur in whole or in part within or outside the normal start and end dates of a semester, and in any case shall not exceed two semesters. -Part-time field practica of two semesters will require approval from the proposed agency, field instructor, and the M.S.W. Field Education Coordinator.~~

The M.S.W. Field Education Coordinator is responsible for facilitating appropriate matches among the student, field instructor, and field practicum setting. Although consideration will be given to all factors affecting the location and type of social work field practica, final approval of field practica rests with the School of Social Work. The School cannot guarantee the availability of M.S.W. field instruction in all communities and at all times. Students are responsible for their own financial support during the field practicum.

At least ~~four-six~~ months prior to the commencement of the semester in which they intend to begin SCWK 6917, all students shall submit a completed Intent to Register in M.S.W. Field Practicum form and a current resume to the M.S.W. Field Education Coordinator. ~~At least six weeks before the practicum commences, students shall submit an M.S.W. Field Practicum Proposal to the Coordinator.~~ The School of Social Work depends on the cooperation of community agencies external to the University to provide field practica and instruction to its students. ~~Many of these agencies have a range of requirements, such as~~ A field agency may, prior to starting the practicum, require a Criminal Record Check, Vulnerable Sector Check, Child Protection Records Check, ~~or~~ Health Check etc., which must be completed before starting the practicum. Students unable to meet the agency's requirements may be delayed in their program or prevented from completing their program of study. Students are required to complete and update these requirements in a timely fashion and at their own expense. The procedures of any given agency may change from time to time and are beyond the control of the University.

Evaluation of the field practicum will be on a PASS/FAIL basis. Students who voluntarily withdraw from the field practicum without prior approval of the M.S.W. Field Education Coordinator, or who conduct themselves in such a manner as to cause the agency and the M.S.W. Field Education Coordinator to terminate the practicum, will normally be awarded a grade of FAIL in the field practicum.



## Social Work (cont'd)

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

### **32.5 Course Format**

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

1. SCWK 6012, 6013, 6014, and 6413 are online courses.
2. SCWK 6313, 6314 and 6315 are online courses with a mandatory on-campus institute component consisting of 36 hours of classroom instruction. Course materials and activities for the pre-institute and post-institute components of the courses are available online for students. Classes are taught full time and students are expected ~~Students must be available on a full-time basis to~~ to attend classes and complete assignments and group projects during ~~the institute~~ this portion of these courses. It is recommended that students take leave from their employment for the duration of an on-campus institute, which may be scheduled in a combination of weekday, evening, and weekend hours within a two-week time period. The final decision regarding the on-campus institute schedule rests with the School of Social Work.
3. SCWK 6917 can be completed ~~in St. John's, or in a student's home community,~~ where appropriate supervision is available.
4. SCWK 6000 and 6417 can be completed in ~~St. John's or in a student's home comm~~ consultation with the student's Pathway mentor. ~~unity.~~
5. In exceptional circumstances, and contingent upon student numbers and school resources, additional course sections may be offered in a regular classroom format.

### **32.6 Period of Study**

For students admitted to the program under **Plan of Study** above:

➤1. For part-time students, the program is designed to permit completion of all degree requirements within three academic years (nine semesters) or two academic years (six semesters). The following is a sample program of study for nine semesters:

- **Fall Semester:**
- SCWK 6012 in Year 1
- SCWK 6000, 6013, 6313, 6315 or 6413 in Year 2
- SCWK 6000, 6013, 6313, 6315 or 6413 in Year 3
- **Winter Semester:**
- SCWK 6013, 6014, 6313, 6314, or 6413 in Year 1
- SCWK 6000, 6013, 6014, 6313, 6314, or 6413 in Year 2

Social Work (cont'd)

- SCWK 6000, 6013, 6014, 6313, 6314, or 6413 in Year 3
- **Spring Semester:**
- SCWK 6014, 6314 or 6315 in Year 1
- SCWK 6000, 6014, 6314 or 6315 in Year 2
- SCWK 6917 (Field Practicum) may be completed in Fall/Winter/Spring of Year 3
- SCWK 6417 (Pathway Scholarship) is the final requirement to be completed and may be completed in the same semester as SCWK 6917 (Field Practicum). Students are required to register for SCWK 6000 concurrently with SCWK 6917 and 6417.
- ◆2. For full-time students, course route, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:
  - **Fall Semester:**
  - SCWK 6000, 6012, 6313 (Institute) and 6413. Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315
  - **Winter Semester:**
  - SCWK 6000, 6013, 6014, and 6314 (institute)
  - **Spring Semester:**
  - SCWK 6000, 6315 (Institute), 6417 (pathway scholarship), and 6917 (Field Practicum).
- ◆3. For full-time students, thesis route, the program is designed to permit completion of all degree requirements within one academic year (three semesters), as follows:
  - **Fall Semester:**
  - SCWK 6000, 6012, 6313 (Institute) and 6413
  - **Winter Semester:**
  - SCWK 6000, 6013, 6014, 6314 Institute). Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315
  - **Spring Semester:**
  - SCWK 6000, 6315, 6917 (Field Practicum), thesis. Thesis students are required to complete 6313 and only one of the two institute courses 6314 or 6315

**32.7 Evaluation**

- ◆1. Failure to attain a final passing grade of A or B in a program course, or PASS 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

## Social Work (cont'd)

Canadian Association of Social Workers ([www.casw-acts.ca/en/Code-of-Ethics](http://www.casw-acts.ca/en/Code-of-Ethics)). Students who are registered in their home province are required to comply with the current Code of Ethics of their provincial ~~association of~~ social work regulatory body. ~~ers~~. Students who are not registered in their home province are required to comply with the current Code of Ethics of the Canadian Association of Social Workers ([www.casw-acts.ca/en/Code-of-Ethics](http://www.casw-acts.ca/en/Code-of-Ethics)). Students who fail to meet this requirement will be required to withdraw from the School upon the recommendation of the M.S.W. Program Committee.

### **32.8 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 Courses**
- 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/co-requisite 6012*) (~~credit may not be obtained for both 6013 and the former 6540~~)
- 6014 Leadership in Social Policy and Programs (*prerequisite/co-requisite 6012*) (~~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 Practicum (*prerequisites 6012, 6013, 6014, 6313 and 6413 and prerequisite/co-requisite two of 6314 and 6315 for course route students; one of 6314 or 6315 for thesis route students*) (~~credit may not be obtained for both 6917 and the former 6912~~)
- ~~**Program Core Courses for Students Admitted Prior to Fall 2011**~~
- ~~6011 Critical Thinking and Ethical Evaluation for Assessment and Intervention~~

## Social Work (cont'd)

- ~~6312 Crisis Intervention, Brief and Integrated Therapies for Diverse Individuals (prerequisite/co-requisite 6011) (credit may not be obtained for both 6312 and 6313)~~
- ~~6322 Family Therapy: Promotion of Strengths and Prevention of Violence in Diverse Families (prerequisite 6011) (credit may not be obtained for both 6322 and 6313)~~
- ~~6332 Social Work Perspectives in Interdisciplinary Team Development and Group Therapy (prerequisite 6011) (credit may not be obtained for both 6332 and 6315)~~
- ~~6412 Research Design for Social Work Assessment and Evaluation (prerequisite/co-requisite 6011) (credit may not be obtained for both 6412 and 6413)~~
- ~~6422 Data Analysis for Social Work Assessment and Evaluation (prerequisite 6011 and 6412) (credit may not be obtained for both 6422 and 6413)~~
- ~~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) (credit may not be obtained for both 6912 and 6917)~~
- 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: **Program Elective Courses for Students Admitted Prior to Fall 2011**
- ~~6230 Seminar in Community Development (credit may not be obtained for both 6230 and 6314)~~
- 6530 Seminar in Social Administration: Evaluation of Policies and Programs (~~credit may not be obtained for both 6530 and 6014~~)
- 6540 Supervision in Professional and Clinical Practice (~~credit may not be obtained for both 6540 and 6013~~)
- 6550 Feminist Therapy in Social Work Practice  
~~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**

Social Work (cont'd)

- 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.”*

52.4 Fisheries Science Program

Page 654, 2018-2019 Calendar, under the heading 27 Regulations Governing the Master of Science in Fisheries Science, amend the section as follows:

**“27 Regulations Governing the Master of Science in Fisheries Science**

- [www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)
- [www.mi.mun.ca](http://www.mi.mun.ca)

The Degree of Master of Science in Fisheries Science is a research-focused Master's degree offered by the School of Fisheries, at the Fisheries and Marine Institute. The Degree of Master of Science in Fisheries Science is offered in Fisheries Science and ~~Technology~~ **Technology** and Stock Assessment.

An Academic Advisory committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). This committee will consist of an Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University. Normally, all appointments will be for a period of three years.

In addition to meeting the regulations governing the Degree of Master of Science in Fisheries Science, students must also meet the **General Regulations of the School of Graduate Studies** and any additional requirements of the appropriate academic unit.

**27.1 Fisheries Science (Fisheries Science and Technology)**

The Degree of Master of Science in Fisheries Science (Fisheries Science and Technology) is a research-focused Master's degree offered by the School of Fisheries at the Fisheries and Marine Institute. This program is for students who aim to pursue a career in fisheries science, and includes skills training that will empower students to conduct publication-quality research in any aspect of fisheries science. The degree is normally offered to full-time students. These regulations must be read in conjunction with the **General Regulations** of the School of Graduate Studies of Memorial University of Newfoundland.

## Fisheries Science Program (cont'd)

### **27.1.1 Qualifications for Admission**

1. Admission is limited and competitive. To be considered for admission an applicant will normally hold at least a high second class Honours Degree, or an M.D. Degree, or the equivalent of either, both in achievement and depth of study, from an institution recognized by the University Senate.
2. Any other applicant may be considered for admission provided that:
  - a. the applicant's undergraduate record after the first year shows an average of at least a grade of 'B' in courses in the proposed field of specialization;
  - b. the applicant's overall undergraduate record after the first year shows an average of at least a grade of 'B' in all courses taken; and
  - c. the applicant demonstrates a commitment and passion for aquatic science, ideally in fisheries, through employment or experience in field schools, research programs, the fishing industry, regulatory agencies or government departments, non-governmental organizations, consulting activities, or other relevant activities.
3. Applicants must meet the English Proficiency Requirements described under **General Regulations, English Proficiency Requirements**.

### **27.1.2 Program of Study and Research**

Every student for the Master of Science in Fisheries Science (Fisheries Science and Technology) degree shall normally be required to complete all of:

1. 12 credit hours including:
  - a.
    - FISH 6000 Science Communication for Fisheries
    - FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
    - FISH 6002 Data Collection, Management, and Display
    - FISH 6003 Statistics and Study Design for Fisheries Science
  - b. A thesis composed of at least one chapter of original research.
2. A student may be required by the Supervisory Committee to take additional courses.
3. All program course requirements should be completed within four semesters from the date of first registration in the M.Sc. degree program. Students will normally complete course requirements in their first two semesters.
4. Within three months of the first registration in the M.Sc. degree program, the student will meet with the Supervisory Committee. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the

### Fisheries Science Program (cont'd)

student and to the Dean of Graduate Studies. Subsequent meetings must occur at least annually, with a report filed after each meeting.

~~5. The student shall complete a written thesis proposal that is approved by the Supervisor and the Supervisory Committee. The proposal shall be provided to the Head for inclusion in the student's file. After approval, the student shall orally present the proposal in a presentation open to the public.~~

6. The student must present the thesis seminar of 20-30 minutes duration prior to submission of the thesis to the School of Graduate Studies. ~~The student will be questioned by a panel approved by the Academic Advisory Committee, in conjunction with the student's Supervisory Committee. All others in attendance will be invited to question the student before adjournment. Deficiencies noted at this stage should be carefully considered by the student and the Supervisory Committee prior to submission of the thesis for final examination.~~

7. The thesis shall conform to the School of Graduate Studies **General Regulations, Thesis and Reports.**

#### **27.1.3 Evaluation**

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree a student shall obtain a grade of 'A' or 'B' in each program course as per **General Regulations, Evaluation, Evaluation of Graduate Students.**

2. The Supervisor and the Supervisory Committee may recommend that a student be required to withdraw from the program, if after consultation with the student, it is determined that the student is not making satisfactory progress towards completion of the program and unsatisfactory progress is unlikely to be corrected.

#### **27.1.4 Thesis**

A student must meet the requirements as outlined under the School of Graduate Studies **General Regulations, Thesis and Reports.**

#### **27.1.5 Courses**

- FISH 6000 Science Communication for Fisheries
- FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
- FISH 6002 Data Collection, Management, and Display
- FISH 6003 Statistics and Study Design for Fisheries Science



## Fisheries Science Program (cont'd)

### **27.2 Fisheries Science (Stock Assessment)**

The Degree of Master of Science in Fisheries Science (Stock Assessment) is a research-~~focussed~~ **focused** Master's degree offered by the School of Fisheries at the Fisheries and Marine Institute. This program is for students who aim to pursue a specific career in quantitative stock assessment of fisheries. The Degree is normally offered to full-time students. These regulations must be read in conjunction with the **General Regulations** of the School of Graduate Studies of Memorial University of Newfoundland.

#### **27.2.1 Qualifications for Admission**

1. Admission is limited and competitive. To be considered for admission an applicant will normally hold at least a high second class Honours Degree, or an M.D. Degree, or the equivalent of either, both in achievement and depth of student, from an institution recognized by the University Senate.
2. Applicants must be able to demonstrate a satisfactory knowledge of mathematics, statistics, and scientific computing.
3. Any other applicant may be considered for admission provided that:
  - a. the applicant's undergraduate record after the first year shows an average of at least a grade of 'B' in courses in the proposed field of specialization;
  - b. the applicant's overall undergraduate record after the first year shows an average of at least a grade of 'B' in all courses taken, and;
  - c. the applicant demonstrates a commitment and passion for mathematics or statistics, through employment or experience in field schools, research programs, regulatory agencies or government departments, non-governmental organizations, consulting activities, or other relevant activities.
4. Applicants must meet the English Proficiency Requirements described under **General Regulations, English Proficiency Requirements**.

#### **27.2.2 Program of Study and Research**

1. Every student for the Master of Science in Fisheries Science (Stock Assessment) degree shall normally be required to complete all of:
  1. ~~15~~**12** credit hours including:
    - a.
      - FISH 6000 Science Communication for Fisheries
      - FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
      - ~~FISH 6002 Data Collection, Management, and Display~~



### Fisheries Science Program (cont'd)

- FISH 6004 Overview of Statistical Stock Assessment
- FISH 6005 Advanced Statistical Stock Assessment
- b. A thesis composed of at least one chapter of original research.
- 2. A student will normally complete course requirements in the first four semesters of the program.
- 3. Within three months of the first registration in the M.Sc. degree program, the student will meet with their Supervisory Committee. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the student and to the Dean of Graduate Studies. Subsequent meetings must occur at least annually, with a report filed after each meeting.
- 4. A student may be required by the Supervisory Committee to take additional courses.
- ~~5. The student shall complete a written thesis proposal that is approved by the Supervisor and the Supervisory Committee. The proposal shall be provided to the Head for inclusion in the student's file. After approval, the student shall orally present the proposal in a presentation open to the public.~~
- 6. The student must present the thesis seminar of 20-30 minutes duration prior to submission of the thesis to the School of Graduate Studies. ~~The student will be questioned by a panel approved by the Academic Advisory Committee, in conjunction with the student's Supervisory Committee. All others in attendance will be invited to question the student before adjournment. Deficiencies noted at this stage should be carefully considered by the student and the Supervisory Committee prior to submission of the thesis for final examination.~~
- 7. The thesis shall conform to the School of Graduate Studies **General Regulations, Thesis and Reports.**

### **27.2.3 Evaluation**

1. In order to continue in the School of Graduate Studies and in order to qualify for a Master's Degree a student shall obtain a grade of 'A' or 'B' in each program course as per **General Regulations, Evaluation, Evaluation of Graduate Students.**
2. The Supervisor and the Supervisory Committee may recommend that a student be required to withdraw from the program, if after consultation with the student, it is determined that the student is not making satisfactory progress towards completion of the program and the unsatisfactory progress is unlikely to be corrected.

### **27.2.4 Thesis**

A student must meet the requirements as outlined under the School of Graduate Studies **General Regulations, Thesis and Reports.**

Fisheries Science Program (cont'd)

**27.2.5 Courses**

- FISH 6000 Science Communication for Fisheries
- FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
- ~~FISH 6002 Data Collection, Management, and Display~~
- FISH 6004 Overview of Statistical Stock Assessment
- FISH 6005 Advanced Statistical Stock Assessment”

Page 683, 2018-2019 Calendar, under the heading 34.14 Fisheries Science, amend the section as follows:

**“34.14 Fisheries Science**

- [www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)
- [www.mi.mun.ca](http://www.mi.mun.ca)

The Degree of Doctor of Philosophy is offered in Fisheries Science to full-time and part-time students. The following regulations must be read in conjunction with the **General Regulations** of the School of Graduate Studies of Memorial University of Newfoundland.

An Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Vice-President (Marine Institute). The Committee will consist of an Academic Director as Chair, three members from the Marine Institute, and two members from other academic units of the University. Normally, all appointments will be for a period of three years.

**34.14.1 Admission and Program of Study**

1. Admission into the Ph.D. program in Fisheries Science is normally restricted to applicants holding a Master's Degree or its equivalent. In exceptional circumstances, an applicant with a B.Sc. Degree who has spent not less ~~that~~ than 12 months in an M.Sc. Degree program may be recommended for transfer into a Ph.D. program. For this transfer to be accepted, the applicant must demonstrate, to the satisfaction of the Supervisor and Supervisory Committee, the ability to pursue research at the doctoral level.
2. In addition to completing a thesis of original research, a student will be normally be required to take FISH 6000, and 6001., ~~and 6002.~~ ~~Depending on the background of the student, the Supervisor and Supervisory Committee may deem the student to be exempt from completing any or all of these courses.~~ A student may be will normally

Fisheries Science Program (cont'd)

**be** required by the Supervisor and Supervisory Committee to take **two of** FISH **6002**, 6003, 6004, and/or 6005.

3. Within three months of the first registration in the Ph.D. degree program, the student will meet with the Supervisory Committee. It is the function of a Supervisory Committee to have regular meetings, at least annually, with its graduate student. A meeting report, signed by all members of the Supervisory Committee and student, must be given to the Academic Unit. A copy will be sent to the graduate student and to the Dean of Graduate Studies.

4. At the first committee meeting, the Supervisory Committee shall discuss the student's program and will explore areas of weakness in the student's knowledge, especially where these relate to the intended areas of research. The Supervisory Committee may require the student to take additional courses.

5. The student and the Supervisory Committee will agree on a written thesis proposal outlining the objectives, methods, timetable and funding for the project, and provide the proposal (signed by the student and the Supervisory Committee) to the Head for inclusion in the student's file. This proposal should be no more than five pages in length.

6. The student will present a research seminar to the Academic Unit, normally by the end of the ~~third~~ **fourth** semester following admission, to describe the research topic being investigated and the methodologies to be employed. ~~The Supervisory Committee should be present at this seminar.~~ This seminar provides an opportunity for the student to receive constructive input from the broad research community.

7. A student must successfully complete a Comprehensive Examination, as outlined under **General Regulations**, Comprehensive Examinations, Ph.D. and Psy.D. Comprehensive Examination. The comprehensive examination will be both written and oral.

8. A theses shall conform to **General Regulations, Theses and Reports** of the School of Graduate Studies.

**34.14.2 Courses**

- FISH 6000 Science Communication for Fisheries
- FISH 6001 Ecology, Management, and Practice of North Atlantic Fisheries
- FISH 6002 Data Collection, Management, and Display
- FISH 6003 Statistics and Study Design for Fisheries Science
- FISH 6004 Overview of Statistical Stock Assessment
- FISH 6005 Advanced Statistical Stock Assessment"

52.5 School of Graduate Studies General Regulations 4.8 and 4.10

Page 559, 2018-2019 Calendar, under the heading 4.8 Comprehensive Examinations, amend the section as follows:

**“4.8 Comprehensive Examinations**

**4.8.1 Master's Comprehensive Examination**

1. The composition of the Comprehensive Examination Committee is specified in the Degree and Departmental regulations, and the Committee is appointed by the Associate Vice-President (Academic) and Dean, Graduate Studies. The Associate Vice-President (Academic) and Dean, of Graduate Studies or delegate may exercise the right to attend. All members of the Committee including the Chairperson, but excluding the Associate Vice-President (Academic) and Dean, of Graduate Studies or delegate, shall be voting members.
2. In this examination the ~~candidates~~ students must demonstrate an advanced knowledge of the academic discipline as defined by the academic unit in which they are students. Therefore, in order to be eligible to sit the examination, all course requirements must normally be completed.
3. In cases where there are multiple parts to a comprehensive exam, including written and oral parts, a ~~candidate~~ student must satisfy all parts of the examination to obtain a pass. The requirements to advance to a later part of the examination are specified in the Degree and Departmental regulations or by the appropriate academic unit.
4. Members of the Comprehensive Examination Committee shall decide the results of the comprehensive examination as indicated in a.-d. below:
  - a. The category of 'pass with distinction' will be awarded to ~~candidate~~ students who demonstrate superior knowledge of their ~~chosen field~~ area(s). This category requires unanimous support of the Comprehensive Examination Committee.
  - b. The category of 'pass' will be awarded to ~~candidate~~ students who demonstrate an acceptable knowledge of their ~~chosen~~ area(s) and requires a simple majority vote.
  - c. The category of 're-examination' selects those ~~candidate~~ students with an understanding of their ~~research~~ area(s) that lacks sufficient depth and scope as indicated by a simple majority of the Comprehensive Examination Committee. Only one such re-examination is possible and students in this category are not eligible for the award of 'pass with distinction'. If a re-examination is to be held, it must be conducted not less than one month and not more than six months after the first examination. The decision of the voting members of the Committee following this re-examination can only be 'pass' or 'fail' decided by simple

School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

majority. Failure will lead to immediate termination of the ~~candidate~~ student's program. There is no option for further re-examination.

- d. Students awarded a 'fail' are deemed, by unanimous vote of the Comprehensive Examination Committee, to be unable to demonstrate an adequate understanding of their ~~research~~ area(s). The ~~candidate~~ student's program is terminated. A simple majority vote will default to the award of 're-examination'.

5. The Chairperson of the Comprehensive Examination Committee shall report to the Head of the academic unit who shall report to the Associate Vice-President (Academic) and Dean, Graduate Studies. The result of the comprehensive examination(s) shall be reported to the ~~candidate~~ student by the Associate Vice-President (Academic) and Dean, Graduate Studies.

**4.8.2 Ph.D. and Psy.D. Comprehensive Examination**

1. The ~~candidate~~ student shall submit to a comprehensive examination, which may be written or oral or both as determined by the academic unit. ~~Candidates~~ Students shall normally take the examination no later than the end of the seventh semester in the doctoral program. Unless an extension is approved by the Associate Vice-President (Academic) and Dean, of Graduate Studies, failure to take the examination at this time will result in the termination of the ~~candidate~~ student's program.

2. This examination, whether written or oral, shall be conducted by a Committee appointed by the Associate Vice-President (Academic) and 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~~ student'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 Associate Vice-President (Academic) and Dean, of Graduate Studies or delegate, shall be voting members.

3. In this examination, the ~~candidate~~ student must demonstrate a mastery of those ~~sub-disciplines~~ subjects appropriate to ~~the student's~~ research area(s), as defined by the academic unit in which he or she is a student. Therefore, in order to be eligible to sit the examination, all course requirements must normally be completed. The ~~sub-disciplines~~ area(s) upon which the ~~candidate~~ student will be examined should be made known to the ~~candidate~~ student no later than three months prior to the examination. The ~~candidate~~ student must further be able to relate the specialization of ~~the candidate's~~ their research to the larger context of these ~~sub-disciplines~~ areas.

School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

4. In cases where there are multiple parts to a comprehensive exam, including written and oral parts, a ~~candidate~~ student must satisfy all parts of the examination to obtain a pass. The requirements to advance to a later part of the examination are specified in the Degree and Departmental regulations or by the appropriate academic unit.
5. Members of the Comprehensive Examination Committee shall decide the results of the comprehensive examination as indicated in a.-d. below:
  - a. The category of 'pass with distinction' will be awarded to ~~candidates~~ students who demonstrate superior knowledge of their ~~chosen field~~ area(s). This category requires unanimous support of the Comprehensive Examination Committee.
  - b. The category of 'pass' will be awarded to ~~candidates~~ students who demonstrate an acceptable knowledge of their ~~chosen~~ area(s) and requires a simple majority vote.
  - c. The category of 're-examination' selects those ~~candidate~~ students with an understanding of their ~~research~~ area(s) that lacks sufficient depth and scope as indicated by a simple majority of the Comprehensive Examination Committee. Only one such re-examination is possible and students in this category are not eligible for the award of 'pass with distinction'. If a re-examination is to be held, it must be conducted not less than one month and not more than six months after the first examination. The decision of the voting members of the Committee following this re-examination can only be 'pass' or 'fail' decided by simple majority. Failure will lead to immediate termination of the ~~candidate~~ student's program. There is no option for further re-examination.
  - d. Students awarded a 'fail' are deemed, by unanimous vote of the Comprehensive Examination Committee, to be unable to demonstrate an adequate understanding of their research area(s). The ~~candidate~~ student's program is terminated. A simple majority vote will default to the award of 're-examination'.
6. The Chairperson of the Comprehensive Examination Committee shall report to the Head of the academic unit who shall report to the Associate Vice-President (Academic) and Dean, Graduate Studies. The result of the comprehensive examination(s) shall be reported to the ~~candidate~~ student by the Associate Vice-President (Academic) and Dean, Graduate Studies."

Page 560, 2018-2019 Calendar, under the heading 4.10 Theses and Reports, amend the section as follows:

School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

**“4.10 Theses and Reports**

**4.10.1 Thesis/Report Guide Supplement**

The Guidelines for Theses and Reports, available at ([www.mun.ca/sgs/go/guid\\_policies/theses.php](http://www.mun.ca/sgs/go/guid_policies/theses.php)), approved by the Academic Council of the School of Graduate Studies, provides the details for the examination process, general form and style of the thesis/report, required forms, number of copies, etc., required under this regulation.

**4.10.2 Submission**

1. ~~Candidates~~ Students must submit the thesis/report at least four months before the University Convocation at which the award of the Degree is expected (see **University Diary** in current edition of University Calendar for exact date). The School of Graduate Studies does not accept any responsibility for completing the prescribed procedure in time for the nearest Convocation unless theses or reports are submitted by the prescribed dates in any current academic year.
2. A thesis/report may not be submitted until the ~~candidate~~ student has fulfilled:
  - a. All course requirements, if any
  - b. All language requirements, if any
  - c. The comprehensive examination, if required, and
  - d. All other academic requirements of the academic unit concerned.

**4.10.3 Evaluation of Master's Theses and Reports**

1. Final examiners for the thesis/report will be appointed by the Associate Vice-President (Academic) and Dean, Graduate Studies 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.\*\*\*
  - o \*Modifications may include corrections of typographical errors and errors in nomenclature, improvement in phrasing, or rewriting of sections



School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

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 Associate Vice-President (Academic) and Dean, Graduate Studies, then the student may apply to the Dean for permission to resubmit the thesis for re-examination in one of the following ways:

- . to submit a modified thesis/report to the original examiners.
- a. to submit a modified thesis/report to new examiners.
- b. 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~~ student will not be awarded a pass unless all examiners find the thesis acceptable.

6. Under no circumstances may a thesis/report be re-examined more than once.

**4.10.4 Evaluation of Ph.D. and Psy.D. Theses**

~~Candidates~~ Students for the Degree of Doctor of Philosophy and the Degree of Doctor of Psychology must submit a written dissertation deemed acceptable by the University, and demonstrate their ability to defend their work in a public oral examination. For this reason, the final decision on whether a ~~candidate~~ student will be recommended for the award of the degree is made only at the conclusion of the oral examination (see **The Examination Process**).

**1. Responsibilities of the Thesis Examining Board**

The work of each ~~candidate~~ student will be assessed by a Thesis Examining Board. Its first responsibility is to determine whether the thesis successfully demonstrates the ~~candidate~~ student's competence to undertake independent research work. The Board must be satisfied that the work contributes significantly to knowledge in the field of study; that the contribution is of high scholarly merit; that the ~~candidate~~ student is aware of the pertinent published literature; that it is written in a satisfactory style; and that it is free from typographical and other



School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

mechanical errors. The second responsibility of the Board is to conduct a final oral examination of the candidate student and to then recommend to the Associate Vice-President (Academic) and Dean, of Graduate Studies whether the candidate student should be awarded the Degree.

**2. Composition of the Thesis Examining Board**

The members of the Thesis Examining Board will be appointed by the Associate Vice-President (Academic) and Dean, Graduate Studies, 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 student's Supervisor (who serves on the Board in a non-voting capacity), two examiners from within the University, and one from outside the University. However, when circumstances warrant, a second external examiner may be substituted for one of the internal examiners with permission of the Associate Vice-President (Academic) and Dean, Graduate Studies. 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 student should be permitted to proceed to an oral examination and defence of the work. An examiner may recommend:
  - i. that the candidate student be allowed to proceed to the oral defence of the thesis\*; or
  - ii. that the candidate student not be allowed to proceed to the oral defence at this time\*\*; or
  - iii. that the candidate student should be failed.

\*Any suggested corrections or revisions should be outlined in the examiner's report. It is understood that it will be the responsibility of the Supervisory Committee to discuss the suggested changes with the candidate student, to determine which should be incorporated in the thesis before its final submission.

\*\*This recommendation reflects the examiner's opinion that further research, re-analysis of data, or thorough rewriting of the material is required. The thesis may, however, be re-submitted for examination.

- b. If all examiners recommend that the candidate student should be failed, then the thesis shall not be re-examined.
- c. If an examiner recommends that the candidate student not be allowed to proceed to the oral defence, and this recommendation is accepted by the Associate Vice-President (Academic) and

School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

Dean, Graduate Studies, then the student may apply to the Associate Vice-President (Academic) and Dean, Graduate Studies for permission to resubmit the thesis for re-examination in one of the following ways:

- i. to submit a modified thesis to the original examiners.
  - ii. to submit a modified thesis to new examiners.
  - iii. to submit the original thesis to an Examination Board to be appointed by the Associate Vice-President (Academic) and Dean, Graduate Studies.
- d. No ~~candidate~~ student will be permitted to re-submit a thesis more than once. In case of a re-submitted thesis an examiner may recommend only:
- i. that the ~~candidate~~ student be allowed to proceed to the oral defence of the thesis; or
  - ii. that the ~~candidate~~ student should be failed.
- e. After receiving the reports from all three voting members of the Board the Associate Vice-President (Academic) and Dean, Graduate Studies will consider the recommendations and determine whether an oral defence of the thesis will be scheduled.
- f. The Final Oral Examination and Defence of Thesis will take place at a time and place to be determined by the Associate Vice-President (Academic) and Dean, Graduate Studies and will be chaired by the Associate Vice-President (Academic) and Dean, Graduate Studies ~~or his/her~~ (or delegate). The presence of all members of the Examining Board is normally required.
- g. Following the defence, the Board will meet *in camera* to render a final assessment of the thesis and the ~~candidate~~ student's ability to defend ~~his/her~~ their work. The Board may recommend one of the following outcomes:
- i. Passed with distinction (Awarded to ~~candidate~~ students who demonstrate superior knowledge of their ~~chosen field~~ research area(s); this category requires unanimous support of the Board. A simple majority vote will result in a recommendation of 'passed'.)
  - ii. Passed\*
  - iii. Passed Subject to Conditions\*\*
  - iv. Re-examination required\*\*\*
  - v. Failed\*\*\*\*

\*This recommendation may have attached to it the requirement that the ~~candidate~~ student complete certain specified revisions to the satisfaction of the Supervisory Committee, the Head of the academic unit and the Associate Vice-President (Academic) and Dean, Graduate Studies. These revisions must have been specified in the written appraisal submitted prior to the Oral Examination.

School of Graduate Studies General Regulations 4.8 and 4.10 (cont'd)

\*\*This recommendation is made if there are revisions beyond those specified in the written appraisal submitted prior to the Oral Examination. This recommendation must have the conditions attached and cannot include the option of re-examination.

\*\*\*The members of the Thesis Examination Board may attach to this recommendation a list of any requirements which they feel are appropriate.

\*\*\*\*Re-examination not permitted.

- h. If the members of the Board are unanimous in their recommendation, the Chair of the Examination may accept this recommendation and inform the ~~candidate~~ student of the decision. In any other case, however, the delivering of any final decision shall be deferred pending further consultation within the School of Graduate Studies.
- i. No ~~candidate~~ student shall be permitted more than two Oral Examinations.

**4.10.5 Time Limit for Revision**

The final version of Master's, Ph.D., and Psy.D. theses/reports found acceptable with or without corrections shall be submitted to the School of Graduate Studies within 6 months of the date on which the thesis/report and the student's examiners' reports are returned to the student's academic unit. If a corrected thesis/report is not submitted within 6 months the student is considered to have withdrawn from the program. After this time, the student must apply to be readmitted.

Master's, Ph.D., and Psy.D. theses/reports requiring re-examination shall be resubmitted to the School of Graduate Studies within 12 months of the date on which the thesis/report and the examiner's reports are returned to the student. Students requiring resubmission and re-examination of theses/reports must maintain their registration during this period. Failure to resubmit the revised thesis/report within 12 months will result in termination of the student's program.

***Note:***

*Please refer to **Registration** for regulations governing program registration.*

**4.10.6 Prepublication**

Publication of material before submission of the thesis/report for examination is permitted. The School of Graduate Studies and Supervisor should be informed of such publication.”

52.6 Approval of Revisions to Section 11.9 Governing Master of Education, Educational Technology

Page 608, 2018-2019 Calendar, under the heading 12.9 Courses, amend the section as follows:

**“11.9 Courses**

Course descriptions for graduate course in Education are available at [www.mun.ca/educ/grad/fee\\_deadline.php](http://www.mun.ca/educ/grad/fee_deadline.php).

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 Popular Culture and Literacy Education
- 6107 Arts Education: Creativity in the Classroom
- 6108 Literacy and Language Education: Sociocultural Perspectives
- 6202 Social Context of Educational Leadership
- 6203 Leadership: Theory and Practice
- 6204 Educational Administration: Theory and Practice
- 6205 Educational Policy: Theory and Practice
- 6290 Research and Development Seminar in Educational Leadership Studies
- 6291 Internship in Educational Leadership Studies (6 credit hours)
- 6292 Project in Educational Leadership Studies (6 credit hours)
- 6293 Paper Folio in Educational Leadership Studies (6 credit hours)
- 6300 Teaching and Learning
- 6321 Supervisory Processes in Education
- 6330 Educational Finance
- 6335 Legal Foundations of Educational Administration
- 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
- 6391 Internship in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6392 Project in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6393 Paper Folio in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6394 Biographical Explorations of Teaching and Learning
- 6410 Seminar on Philosophical Issues in Educational Policy and Leadership
- 6420 Ethical Issues and Perspectives in Educational Practice and Policy
- 6425 Comparative Perspectives in Public Education, Reform, and Leadership

Approval of Revisions to Section 11.9 Governing Master of Education,  
Educational Technology (cont'd)

- 6426 Computer Applications in Educational Administration
- 6427 School Community Partnerships
- 6440 Family-School Relations: Leadership and Policy Implications
- 6461 Graduate Research Writing
- 6462 Cultural Landscapes, Knowledge and Pedagogy
- 6463 Relationships First: Rethinking Educational Engagement  
(*credit may be obtained for only one of 6463 or 6936*)
- 6465 School Violence: Leadership and Policy Implications
- 6466 Qualitative Research Methods
- 6467 Quantitative Research Methods
- 6468 Critical Approaches to Educational Research
- 6469 Theoretical and Methodological Foundations of Action Research
- 6502 Contexts of Music Education
- 6503 Teaching Music from the Podium
- 6504 Musicianship, Pedagogy, and Learning
- 6590 Research and Development Seminar in Educational Technology
- 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 Technology
- 6630 Critical Issues in Mathematics Education
- 6632 Current Research in Teaching and Learning of Elementary School Mathematics (*prerequisite: 6630*)
- 6634 Teaching and Learning to Solve Mathematics Problems  
(*prerequisite: 6630*)
- 6635 Teaching and Learning Geometry
- 6636 Teaching and Learning the Concept of Number and Operations
- 6639 Technology and the Teaching and Learning of Mathematics  
(*prerequisite: 6630*)
- 6641 Writing in the Primary, Elementary and Secondary Schools
- 6642 Developmental Reading (K-8)
- 6643 Contemporary Issues in Intermediate and Secondary English
- 6644 Drama in Education
- 6645 Literature for Children and Adolescents
- 6646 Literature in the Secondary School
- 6647 Diagnosis and Remediation of Reading and Writing Difficulties
- 6649 Exploring Multiple Literacies
- 6653 Contemporary Issues in Science Education I
- 6655 The Nature of Science and Science Education

Approval of Revisions to Section 11.9 Governing Master of Education,  
Educational Technology (cont'd)

- 6658 Teaching and Learning Scientific Concepts, Laws, and Theories
- 6660 Information Technology
- 6661 Applications of Media in Education
- 6662 Research Seminar in Teacher-Librarianship
- 6663 The Organization of Learning Resources
- 6664 Seminar in School Improvement
- 6668 Current Issues in Second Language Education
- 6669 Graduate Seminar in Second Language Teaching and Learning
- 6670 Teaching and Learning Social Studies
- 6671 Research in Social Studies Education
- 6672 Issues and Trends in Social Studies
- 6673 Second Language Teaching, Learning and Curriculum (*credit may be obtained for only one of Education 6673, the former 6665 or 6667*)
- 6674 Research in Second Language Writing Education
- 6675 Current Issues in Rural Education
- 6676 Research and Practice in TESL/TEFL (Teaching English as a Second/Foreign Language)
- 6693 Literacy for the Young Child in Home and School
- 6700 Ethical and Legal Issues in Counselling
- 6701 Issues and Methodologies in Learning and Developmental Research
- 6702 Counselling: Theory and Practice
- 6705 Nature and Development of School Counselling Services
- 6706 Career Education and Career Counselling
- 6707 Assessment for Counsellors
- 6708 Group Counselling: Theory and Practice
- 6709 Assessment of Intelligence and Learning Skills
- 6710 Issues in Development and Implementation of Special Education Policy and Practices
- 6711 Behaviour Modification in the Educational Setting
- 6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
- 6713 Educational Applications of Contemporary Cognitive Psychology
- 6714 Principles and Practices in Exceptionality
- 6715 The Theory and Practice of Peer Helping Programs
- 6716 Working with Families and Parents
- 6717 Counselling Adolescents
- 6718 Elementary School Counselling
- 6719 Cultural Issues in Counselling
- 6720 Internship in Counselling Psychology (9 credit hours)
- 6755 Nature and Assessment of Learning Disabilities

Approval of Revisions to Section 11.9 Governing Master of Education,  
Educational Technology (cont'd)

- 6801 Foundations of Post-Secondary Programs
- 6802 Adult Learning and Development
- 6803 Research in Post-Secondary Education
- 6804 Leadership and Human Resource Development in Post-Secondary Education
- 6805 Advanced Human Resource Communications
- 6806 Interprofessional Education in the Health Professions
- 6807 Economics and Finance of Post-Secondary Education
- 6822 Foundations of Instructional Design in Post-Secondary Education
- 6823 Principles of Program Design and Development
- 6831 Organization and Administration of Student Services for the Adult Learner
- 6832 Issues and Trends in the Administration of Post-Secondary Education
- 6841 Student Development Theory, Services and Programs in Post-Secondary Education
- 6890 Research and Development Seminar in Post-Secondary Studies
- 6891 Internship in Post-Secondary Studies (6 credit hours)
- 6900-6910 Special Topics (excluding 6909)
- 6909 Narrative Approaches to Teaching, Learning and Research
- 6911 Multiage Education: An Introduction
- 6912-6950 Special Topics (excluding 6913, 6923, 6924, 6927, 6931, 6932, 6936, 6940)
- 6913 Putting Action Research Methodologies into Practice  
(prerequisite: 6469 Theoretical and Methodological Foundations of Action Research)
- 6923 Perspectives in Indigenous Education
- 6924 Decolonizing Pedagogies
- 6927 Digital Game-based Learning
- 6931 Educational Technology Law
- 6932 Intellectual Technology Law in Teaching and Learning
- 6938 Advanced Individual Counselling: Theory and Practice
- 6940 Administration of Student Services in Post-Secondary Education”

52.7 Psychology

Page 559, 2018-2019 Calendar, under the heading 4.8.2 Ph.D. and Psy.D. Comprehensive Examination, amend the section as follows:

**“4.8.2 Ph.D. and Psy.D. Comprehensive Examination**

Psychology (cont'd)

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. For candidates in the Ph.D. program, all ~~AA~~-members of the Committee including the Chairperson, but excluding the Dean of Graduate Studies, shall be voting members. For candidates in the Psy.D. program, the voting members of the committee shall be clinical psychologists, but will not include Chairperson, the Supervisor, or the Associate Vice-President (Academic) and Dean, Graduate Studies.
3. In this examination, the candidate must demonstrate a mastery of those sub-disciplines appropriate to the candidate's research area, as defined by the academic unit in which the candidate is a student. Therefore, in order to be eligible to sit the examination, all course requirements must normally be completed. The 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 the candidate's research to the larger context of these sub-disciplines.
4. In cases where there are multiple parts to a comprehensive exam, including written and oral parts, a candidate must satisfy all parts of the examination to obtain a pass. The requirements to advance to a later part of the examination are specified in the Degree and Departmental regulations or by the appropriate academic unit.
5. Members of the Comprehensive Examination Committee shall decide the results of the comprehensive examination as indicated in a.-d. below:
  - a. The category of 'pass with distinction' will be awarded to 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.



Psychology (cont'd)

- 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'.
6. The Chairperson of the Comprehensive Examination Committee shall report to the Head of the academic unit who shall report to the Dean. The result of the comprehensive examination(s) shall be reported to the candidate by the Dean."

Page 650, 2018-2019 Calendar, under the heading 25.20 Psychology, amend the section as follows:

**"25.20 Psychology**

[www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)  
[www.mun.ca/science](http://www.mun.ca/science)  
[www.mun.ca/psychology](http://www.mun.ca/psychology)

The Degree of Master of Science is offered in Experimental Psychology. The Degree of Doctor of Philosophy is offered in Experimental Psychology. Interested students may wish to consult the sections in the Calendar describing the [Master of Applied Psychological Science \(Co-operative\)](#) and the Master of Science and Doctor of Philosophy in Cognitive and Behavioural Ecology programs.

**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."~~

## Psychology (cont'd)

Page 700, 2018-2019 Calendar, under the heading 34.32 Psychology, amend the section as follows:

### **“34.32 Psychology**

[www.mun.ca/sgs/contacts/sgscontacts.php](http://www.mun.ca/sgs/contacts/sgscontacts.php)

[www.mun.ca/science](http://www.mun.ca/science)

[www.mun.ca/psychology](http://www.mun.ca/psychology)

The Degree of Master of Science (M.Sc.) is offered in Experimental Psychology. Interested students should also see the [Master of Science in Cognitive and Behavioural Ecology](#). The Degree of Doctor of Philosophy is offered in Experimental Psychology. Interested students may wish to consult the section in the Calendar describing the [Doctor of Philosophy in Cognitive and Behavioural Ecology program](#).

#### **34.32.1 Admission**

- ~~1. All applicants are required to submit results from the General section of the Graduate Record Examinations. An applicant must hold either a Master's Degree or an Honours Bachelor's Degree with first class standing to be considered for admission.~~
- ~~2. At least one letter of reference should come from someone who is familiar with the applicant's research capability.~~

#### **34.32.2 Program of Study**

- ~~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. Part 1 consists of a broad review of the literature that normally pertains to the topic of the thesis area. The literature review should incorporate theoretical, methodological, and empirical findings. Part 2 consists of an oral defence of the literature review. The comprehensive exam aims to ensure that the student is knowledgeable about the range of theories, methodologies, and empirical findings that are fundamental to the chosen field of study.

Psychology (cont'd)

**34.32.3 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 Advanced Statistics in Psychology
- 6001 Research Design
- 6010 Colloquium Series in Psychology (repeatable, non-credit)
- 6100-6130 Special Topics in Experimental Psychology
- 6200 Learning I
- 6201 Learning II
- 6203 Behavioural Pharmacology
- 6210 Behavioural Analysis of Toxins
- 6351 Behavioural Ecology and Sociobiology (*cross-listed as CABE 6351*)
- 6400 Theory and Methods in Social Psychology
- 6401 Social Cognition
- 6402 Group Processes
- 6403 Program Evaluation and Applied Research
- 6404 Project in Applied ~~Social Psychology~~ Psychological Science  
(*This course is open only to students in the Master of Applied ~~Social Psychology~~ Psychological Science.* )
- 6500 Developmental Psychology I
- 6501 Developmental Psychology II
- 6502 Developmental Changes During Old Age
- 6700 Perception
- 6710 Human Information Processing
- 6720 Human Memory
- 6800 Behavioural Neuroscience I
- 6801 Behavioural Neuroscience II
- 6810 Psychometrics
- 6910 Personality
- 6990 Doctoral Seminar I
- 6991 Doctoral Seminar II
- 6992 Doctoral Seminar in Cognitive and Behavioural Ecology  
(*cross-listed as CABE 6992*)
- 699A/B Core Graduate Seminar in Psychology”

53. Senate Committee on Elections and Committees

53.1 Report of the Senate Committee on Elections and Committees: Senate Elections

The Committee on Elections and Committees has elected the following person to the Senate for a term of office commencing immediately and expiring August 31, 2021:

<u>CONSTITUENCY</u>	<u>NAME</u>
SOCIAL WORK	Dr. Brenda LeFrancois

53.2 Senate Elections, 2019-2010

A memorandum dated January 10, 2019, from the University Registrar and Chair of the Committee on Elections and Committees was received reporting the entitlement of each constituency to seats on Senate for the 2019-2020 academic year in accordance with the Procedures for Selection of Senate Members. The entitlement of each constituency is as follows:

Business Administration	2
Education	2
Engineering & Applied Science	4
Grenfell Campus - School of Arts and Social Science	2
Grenfell Campus - School of Fine Arts	2
Grenfell Campus - School of Science and Environment	2
Human Kinetics and Recreation	2
Humanities and Social Sciences	6
Library	2
Marine Institute	6
Medicine	6
Music	2
Nursing	2
Pharmacy	2
Science	6
Social Work	2
<b>TOTAL</b>	<b>50</b>

Senate Elections for 2019-2020 will be conducted shortly and the results will be submitted to Senate when they are finalized.

53.3 Name for Membership on Senate Standing Committees (Information Only)

The Committee on Senate Elections and Committees approved the following membership on the following Senate Standing Committee for a term commencing immediately and expiring August 31, 2021:

**Teaching and Learning Committee**

Shawn Pendergast (Marine Institute)

**REGULAR AGENDA**

54. Report of the Senate Committee on Undergraduate Studies

Dr. Shannon Sullivan noted that he would like to acknowledge Norm Catto, Chair of Curriculum Planning Committee, Humanities and Social Sciences, Jennifer Porter, Deputy Registrar and Secretary to the Senate Committee on Undergraduate Studies, and Brian Hammond, Recording Secretary to the Senate Committee on Undergraduate Studies, for all their hard work on the calendar changes, especially the Faculty of Humanities and Social Sciences calendar changes who had a number of staff turnovers. They went above and beyond preparing these changes putting in a lot of time and effort.

54.1 Revisions to Residence Requirements – Application of University Regulations

A memorandum dated December 10, 2018, was received from Jennifer Porter, Secretary, Senate Committee on Undergraduate Studies, noting that on November 13, 2018, Senate approved revisions to the Residence Requirements for Memorial University of Newfoundland. While not explicitly stated in the proposal approved by Senate, it is the long-standing interpretation of the Office of the Registrar that once approved by Senate new University Regulations may be applied immediately. As such, during the interim between Senate's approval and prior to the new regulation being printed in the University Calendar, the newly revised Residence Requirement regulation should be applied immediately when it is to a student's advantage.

It was moved by Dr. George, seconded by Dr. Rohr, and carried that this be approved.

54.2 School of Pharmacy

It was moved by Dr. Bugden, seconded by Dr. Dostaler, and carried that the following calendar changes be approved.

School of Pharmacy (cont'd)

Page 436, 2018-2019 Calendar, under the heading 6.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program, amend Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program as follows:

**Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program**

<b>Term</b>	<b>Three Year Option – Required Courses</b>	<b>Four Year Option – Required Courses</b>
Fall Year 1, Academic Term 1	PHAR 4900 PHAR 4901 PHAR 4902	PHAR 4900 PHAR 4901 PHAR 4902
Winter Year 1, Academic Term 2	PHAR 4903 PHAR 4910	PHAR 4903 <u>PHAR 4910</u>
Spring Year 1, Academic Term 3	PHAR 5901	
Fall Year 2, Academic Term 4	PHAR 5902 PHAR 5920	PHAR 5902
Winter Year 2, Academic Term 5	PHAR 5903 PHAR 5904	<del>PHAR 4910</del> <u>PHAR 5903</u>
Spring Year 2, Academic Term 6	PHAR 6900 PHAR 6930	PHAR 5901
Fall Year 3, Academic Term 7	PHAR 5905	PHAR 5920
Winter Year 3, Academic Term 8	PHAR 610P	<del>PHAR 5903</del> PHAR 5904
Spring Year 3, Academic Term 9	PHAR 611P	PHAR 6900 PHAR 6930
Fall Year 4, Academic Term 10		PHAR 5905
Winter Year 4, Academic Term 11		PHAR 610P
Spring Year 4, Academic Term 12		PHAR 611P

Page 437, 2018-2019 Calendar, under the heading 7.2.2 Promotion Status, amend the section as follows:

**“7.2.2 Promotion Status**

A student's promotion status at the end of each Academic year will be in one of the following two categories:

**7.2.2.1 Clear Promotion**

Clear Promotion means a student can proceed to the next Academic year. Clear Promotion will be granted when all of the following criteria are met:

### School of Pharmacy (cont'd)

1. A student has obtained a passing grade of pass (PAS) (numeric grade of ~~at least 50% or PAS~~) in each course as outlined in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program and in the **course descriptions**.
- ~~2. In the academic years where PHAR 4900 and 6900 are taken, a student has attended the relevant course (PHAR 4900 or 6900) on campus and obtained a grade of PAS (pass) in the course.~~
3. 2. A student has maintained professional and ethical behaviour consistent with the Student Code of Conduct as outlined at [www.mun.ca/student](http://www.mun.ca/student) and with the requirements for conduct and professionalism in the School of Pharmacy as outlined at [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy).

#### **7.2.2.2 Promotion Denied**

Promotion Denied means Clear Promotion is not achieved at the end of the Academic year. Promotion Denied will be granted when any of the following criteria are met:

1. A student has obtained ~~less than a pass~~ a failing grade (numeric grade of ~~less than 50% or FAL~~) in any course as outlined in Table 2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program and in the **course descriptions**.
- ~~2. In the academic years where PHAR 4900 and 6900 are taken, a student has failed to attend the relevant course (PHAR 4900 or 6900) on campus and/or has obtained a grade of FAL (fail).~~
3. 2. A student has not maintained professional and ethical behaviour consistent with the Student Code of Conduct as outlined at [www.mun.ca/student](http://www.mun.ca/student) and with the requirements for conduct and professionalism in the School of Pharmacy as outlined at [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy).

Notwithstanding the above, the School of Pharmacy may offer the student the option to repeat a course on the grounds of academic difficulties. This may be offered only once during the student's program. This restriction may be waived if it has been demonstrated that the student's academic performance has been adversely affected by factors duly authenticated and acceptable to Committee on Undergraduate Studies of the School of Pharmacy.”

Page 434, 2018-2019 Calendar, under the heading 5.1.3 Admission Requirements, amend the section as follows:

## School of Pharmacy (cont'd)

### **“5.1.3 Admission Requirements**

Applicants who are not currently students at Memorial University of Newfoundland must apply for admission to the University under the **Categories of Applicants, Admission Criteria and Other Information** outlined under **UNIVERSITY REGULATIONS- Admission/Readmission to the University (Undergraduate)**. In addition to meeting these regulations, applicants to the School must meet requirements as indicated below.

1. To be considered for admission, an applicant must have completed the 30 credit hours outlined below by the end of the Winter term for the year in which admission is being sought. These courses and credits must have been taken at Memorial University of Newfoundland or accepted for transfer credit from an academic institution. The 30 credit hours are:
  - Biology 1001 and 1002
  - Chemistry 1050 and 1051
  - 6 credit hours in English (~~a Critical Reading and Writing (CRW) course is recommended~~), 3 credit hours of which may be replaced by any Memorial University Critical Reading and Writing course.
  - Mathematics 1000 and 1001
  - Physics 1020 or 1050, and Physics 1021 or 1051
2. For students attending **Grenfell Campus**, the following course offerings are acceptable for admission to the School;
  - Biology 1001 and 1002
  - Chemistry 1200 and 1001
  - 6 credit hours in English (~~a Critical Reading and Writing (CRW) course is recommended~~), 3 credit hours of which may be replaced by any Memorial University Critical Reading and Writing course.
  - Mathematics 1000 and 1001
  - Physics 1020 or 1050, and Physics 1021 or 1051
3. Normally an application will not be considered from an applicant who cannot produce evidence that the above requirements have been met or will have been met by end of the Winter term of the year in which admission is being sought.
4. An unsuccessful applicant who wishes to reapply for admission is required to submit the application forms relevant to the year of reapplication and will be required to enter into the competition for that year.”



School of Pharmacy (cont'd)

Page 435, 2018-2019 Calendar, under the heading 6.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program, amend the section as follows:

**6.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program**

- The 224 credit hour full-time, entry-to-practice Doctor of Pharmacy (Pharm.D.) program requires 30 credit hours before admission and 194 credit hours after admission to the program.
- The program courses normally shall be taken in the Academic Terms in the sequence and course load as set out in **Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program**.

**Table 1 Doctor of Pharmacy (Pharm.D.), Full-Time Program**

<b>Term</b>	<b>Required Courses</b>
Courses required for admission as indicated under <b><u>Admission Requirements, Doctor of Pharmacy (Pharm.D.), Full-Time Program</u></b> .	<ul style="list-style-type: none"> <li>• Biology 1001 and 1002</li> <li>• Chemistry 1050 and 1051 (St. John's Campus) or Chemistry 1200 and 1001 (Grenfell Campus)</li> <li>• 6 credit hours in English (<del>an English Critical Reading and Writing course is recommended</del>) <u>3 credit hours of which may be replaced by any Memorial University Critical Reading and Writing (CRW) course</u></li> <li>• Mathematics 1000 and 1001</li> <li>• Physics 1020 or 1050 and Physics 1021 or 1051</li> </ul>
• Fall Year 1, Academic Term 1	<ul style="list-style-type: none"> <li>• Chemistry 2400</li> <li>• PHAR 2002</li> <li>• PHAR 2010 (may be completed in Fall, Winter or Spring)</li> <li>• PHAR 2201</li> <li>• PHAR 2250</li> <li>• PHAR 2610</li> </ul>
• Winter Year 1, Academic Term 2	<ul style="list-style-type: none"> <li>• Chemistry 2401</li> <li>• PHAR 2003</li> <li>• PHAR 2004</li> <li>• PHAR 2010 (if not previously completed)</li> <li>• PHAR 2202</li> <li>• PHAR 2251</li> <li>• PHAR 2620</li> </ul>
• Spring Year 1, Academic Term 3	PHAR 2010 (if not previously completed)
• Fall Year 2, Academic Term 4	<ul style="list-style-type: none"> <li>• PHAR 3111</li> <li>• PHAR 3250</li> <li>• PHAR 3270</li> <li>• PHAR 3801</li> <li>• PHAR 3805</li> </ul>

• Winter Year 2, Academic Term 5	<ul style="list-style-type: none"> <li>• PHAR 3006</li> <li>• PHAR 3251</li> <li>• PHAR 3271</li> <li>• PHAR 3410</li> <li>• PHAR 3810</li> <li>• PHAR 3825</li> </ul>
• Spring Year 2, Academic Term 6	PHAR 305P
• Fall Year 3, Academic Term 7	<ul style="list-style-type: none"> <li>• PHAR 4250</li> <li>• PHAR 4270</li> <li>• PHAR 4620</li> <li>• PHAR 4802</li> <li>• PHAR 4810</li> <li>• Statistics 2550</li> </ul>
• Winter Year 3, Academic Term 8	<ul style="list-style-type: none"> <li>• PHAR 4251</li> <li>• PHAR 4271</li> <li>• PHAR 4420</li> <li>• PHAR 4820</li> <li>• PHAR 4860</li> </ul>
• Spring Year 3, Academic Term 9	<ul style="list-style-type: none"> <li>• PHAR 406P</li> <li>• PHAR 407P</li> </ul>
• Fall Year 4, Academic Term 10	<ul style="list-style-type: none"> <li>• PHAR 5250</li> <li>• PHAR 5270</li> <li>• PHAR 5430</li> <li>• PHAR 5815</li> <li>• PHAR 5830</li> </ul>
• Winter Year 4, Academic Term 11	<ul style="list-style-type: none"> <li>• PHAR 508P</li> <li>• PHAR 5251</li> <li>• PHAR 5271</li> <li>• PHAR 5275</li> <li>• PHAR 5640</li> </ul>
Year 5, Advanced Pharmacy Practice Experience	<ul style="list-style-type: none"> <li>• PHAR 605P</li> <li>• PHAR 606P</li> <li>• PHAR 607P</li> <li>• PHAR 608P</li> </ul>

Page 438, 2018-2019 Calendar, under the heading 8 Supplementary and Deferred Examination Regulations, amend the section as follows:

~~“8 Supplementary and Deferred Examination Regulations~~

~~1. Supplementary examinations may be permitted in some courses offered by the School of Pharmacy. Students seeking to write a supplementary midterm or final examination shall apply in writing by completing the “Application for Supplementary Examination” form which is available from the School’s website at [www.mun.ca/pharmacy/programs/bsc/currentstudents.php](http://www.mun.ca/pharmacy/programs/bsc/currentstudents.php).~~

### School of Pharmacy (cont'd)

- ~~2. This form must be submitted within seven days following release of midterm marks in the case of supplementary midterm examinations or within seven days following release of the final grades in the case of supplementary final examinations. The completed form should be submitted to the Dean's Office for consideration.~~
- ~~3. The transcript will indicate that the final grade was earned as a result of a supplementary examination. Course coordinators shall advise students in the course outline that such a notation will be made on the transcript.~~
- ~~4. A student shall be permitted to write a maximum number of one supplementary examination (excluding Pharmacy Practice courses) during each Academic year of the pharmacy program. For any one registration in a course, a student shall be permitted to write a final supplementary examination only once.~~
- ~~5. For further details please refer to the School's Supplementary Examination Policy which is available at [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy) or contact the Associate Dean of Undergraduate Studies.~~
- ~~6. Memorial University of Newfoundland has official regulations regarding deferred final examinations, available at **UNIVERSITY REGULATIONS – General Academic Regulations (Undergraduate) – Exemptions From Final Examinations and Procedures for Applying to Write Deferred Examinations**. Deferred midterm examinations may be permitted in some courses offered by the School of Pharmacy. For details refer to the School's Deferred Examination Policy at [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy) or contact the Associate Dean of Undergraduate Studies.~~

## **8 Supplementary Final Examinations**

Supplementary examinations will be offered in Pharmacy courses that have a final examination. Please note that supplementary exams in PHAR 2004, PHAR 3111 and PHAR 3006 are at the discretion of the instructor.

### **8.1 Doctor of Pharmacy (Pharm.D.), Full-Time Program**

1. Supplementary examinations are permitted only in Pharmacy courses that have a final examination.
2. Normally, students receiving a final grade of 45-49% in a Pharmacy course and a term grade in the course, excluding the original final exam, of at least 50% may write a supplementary examination.
3. Supplementary examinations will be of similar length, degree of difficulty and weight as the original final examination.
4. Students may write a supplementary examination for any one course only once.

School of Pharmacy (cont'd)

5. No more than three supplementary examinations in Pharmacy courses can be written during the program.
6. Students who wish to write a supplementary examination must apply in writing by completing the "Application for Supplementary Final Examination" form available from the School's website. The completed form should be submitted to the Dean's Office within 48 hours of the official release of grades by the University.
7. Any student writing a supplementary examination may obtain no more than a maximum grade of 65% in the course. The transcript will indicate that the final grade was earned as a result of a supplementary examination and that the maximum obtainable final grade is 65%.
8. Supplementary examinations will normally be written no later than the first week of the semester immediately following the one in which the course was failed, and will normally coincide with the writing of deferred examinations. Grades for supplementary examinations will be submitted to the Office of the Registrar within one week following the commencement of classes for that semester.

**8.2 Doctor of Pharmacy (Pharm.D.) for Working Professionals, Part-Time Program**

1. Supplementary examinations are permitted only in Pharmacy courses that have a final examination.
2. Normally, students receiving a final grade of 55-59% in a Pharmacy course and a term grade in the course, excluding the original final exam, of at least 60% may write a supplementary examination.
3. Supplementary examinations will be of similar length, degree of difficulty and weight as the original final examination.
4. Students may write a supplementary examination for any one course only once.
5. No more than three supplementary examinations in Pharmacy courses can be written during the program.
6. Students who wish to write a supplementary examination must apply in writing by completing the "Application for Supplementary Examination" form available from the School's website. The completed form should be submitted to the Dean's Office within 48 hours of the official release of grades by the University.
7. Any student writing a supplementary examination may obtain a final grade no higher than 60% in the course. The transcript will indicate that the final grade was earned as a result of a supplementary examination and that the maximum obtainable final grade is 60%.
8. Supplementary examinations will be written no later than the first week of the semester immediately following the one in which the course was failed, and will normally coincide with the writing of

School of Pharmacy (cont'd)

deferred examinations. Grades for supplementary examinations will be submitted to the Office of the Registrar within one week following the commencement of classes for that semester.”

54.3 Faculty of Education

It was moved by Dr. Surprenant, seconded by Dr. George, and carried that the following calendar changes be approved. It was noted that Dr. Edith Furey was there on behalf of Dr. Anderson to answer any questions that may arise.

Page 91, 2018-2019 Calendar, under the heading 7.1 General Degree Programs, amend the section as follows:

**“7.1 General Degree Programs**

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

1. The **Bachelor of Education (Intermediate/Secondary)** is a second degree program designed to prepare teachers of grades 7-12. The program is offered in a three semester (12 month), full-time format, and commences in the Fall semester of each year.
2. The **Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education** is a program designed to prepare both Intermediate/Secondary and Technology Education teachers. The program is offered in a four semester (16 month), full-time format and commences in the Spring of each year. A student in the program will complete courses that address the development of basic skills and competencies in a variety of technological areas and how to apply them through design and problem solving processes in a school classroom/laboratory setting.
3. The **Bachelor of Education (Post-Secondary) as a First Degree** is designed to prepare students for a variety of instructional and leadership roles in formal and informal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.
4. The **Bachelor of Education (Post-Secondary) as a Second Degree** is a second degree program designed to prepare students for a variety of instructional and leadership roles in informal and formal post-secondary education, including careers in academic, adult, community, technical and trades, and professional education.

### Faculty of Education (cont'd)

Students in this program come from diverse backgrounds including administrative, academic, adult education, business, health, literacy, policy, student services, and technical and trades professions. The program is available through part-time or full-time study. Students undertaking the program full-time are advised that a course load of 15 credit hours may not be available each semester.

5. The **Bachelor of Education (Primary/Elementary) as a First Degree** is a full-time, 150 credit hour degree program designed to prepare teachers for kindergarten through grade six. With the appropriate academic planning, a student can commence this Education program in the Fall semester of the third year of studies.
6. The **Bachelor of Education (Primary/Elementary) as a Second Degree** is a 72 credit hour program ~~offered at the St. John's and Grenfell Campuses~~ and is intended for students who have completed an appropriate Bachelor's degree. ~~The program is offered in a two-year (September-June), full-time format, and commences in the Fall semester of each year. This program is offered in a four semester (16 month), full-time format and commences in the Spring semester of each year.~~ A 75 credit hour **French as a Second Language Immersion Option** is available ~~at the St. John's Campus only and commences in August each year. (This program is currently under review and the program's timeline is subject to change including a possible Fall commencement in the 2019-20 academic year. For further information contact the Office of Undergraduate Programs.)~~ ~~The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office.~~
7. The **Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education** is an 85 credit hour integrated program intended for students who have completed an appropriate Bachelor's degree. The program is designed for the preparation of K-6 classroom teachers with a focus on STEM education (science, technology, engineering, and mathematics). The program is offered in a two-year (September - May) full-time format, and commences in the Fall semester of each year. This program will run for three cohorts of students beginning 2018. For information about admission beyond Fall 2020, prospective applicants should contact the [Office of Undergraduate Programs](#), Faculty of Education by telephone at (709) 864-3403 or by e-mail at [muneduc@mun.ca](mailto:muneduc@mun.ca).
8. The **Bachelor of Music Conjoint with Bachelor of Music Education** is a 159 credit hour, five-year conjoint degree program offered in partnership with the School of Music. This program is designed for the preparation of K-12 music teachers, and other professionals in positions related to music education.

Faculty of Education (cont'd)

9. The **Bachelor of Music Education as a Second Degree** is a 45 credit hour degree program for students who have already been awarded a Bachelor of Music. This program is the same as the music education component of the conjoint program. The program is designed to prepare music teachers in all facets of school music education: foundations of music education; primary/elementary, intermediate/secondary classroom music; and choral and instrumental music education. The program consists of 30 credit hours of course work in music education and general foundational education and a 15 credit hour teaching internship.
10. The **Bachelor of Special Education** is a second degree program designed for the preparation of Special Education teachers and is available through part-time or full-time study.”

Page 91, 2018-2019 Calendar, under the heading 8 Admission/Readmission Regulations for the Faculty of Education, amend the section as follows:

**“8 Admission/Readmission Regulations for the Faculty of Education**

The program regulations for each degree and diploma program listed below can be found at [Program Regulations](#).

In addition to meeting [UNIVERSITY REGULATIONS](#), an applicant must meet the [Admission/Readmission Regulations for the Faculty of Education](#) below and the [Admission/Readmission Regulations](#) for his/her program of admission/readmission.

1. Admission to degree and diploma programs within the Faculty of Education is limited, selective and highly competitive. Meeting minimum admission requirements does not guarantee acceptance to a program. The Faculty reserves the right to limit the number of spaces available in each program. When the number of eligible applicants exceeds the number of spaces available in a particular program, preference may be given to applicants who are permanent residents of Newfoundland and Labrador.
2. At least three positions per year are available in Education programs for applicants of Aboriginal ancestry who have met the admission requirements. Applicants must submit a letter of request with the Faculty application and provide documentation of Aboriginal ancestry.

The application for admission or readmission to programs offered by the Faculty of Education is submitted online; current and returning Memorial University of Newfoundland applicants should apply

Faculty of Education (cont'd)

using the Admissions menu within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin). Applicants who are new to Memorial University of Newfoundland should follow the application instructions at [www.mun.ca/undergrad/apply](http://www.mun.ca/undergrad/apply). Transcripts from institutions other than Memorial University of Newfoundland and any other supporting documents required must be sent to the Office of the Registrar in accordance with the deadlines specified for each program in the Application Deadline Dates table below. Applications received later than the stated deadline dates will be processed as time and resources permit.

**Application Deadline Dates**

<b>Program</b>	<b>Commencement Date</b>	<b>Application Deadline</b>
Bachelor of Education (Intermediate/Secondary)	Fall	January 15
Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education	Spring	January 15
Bachelor of Music Education - first and second degree	Fall	January 15
Bachelor of Education (Post-Secondary) - first and second degree	Fall Winter	May 15 September 15
Bachelor of Education (Primary/Elementary) as a First Degree	Fall	January 15
Bachelor of Education (Primary/Elementary) as a Second Degree ( <del>This program is currently under review and the program's timeline is subject to change including a possible Fall commencement in the 2019-20 academic year. For further information contact the <a href="#">Office of Undergraduate Programs</a>.</del> ) The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office.	<del>Spring</del> Fall	January 15
Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education	Fall	January 15
Bachelor of Special Education	Fall	January 15
Diploma in Adult Learning and Post-Secondary Education	Fall Winter	May 15 September 15

- Admission to programs within the Faculty of Education is determined by a Selections Committee and is based on the criteria listed for each degree/diploma program. An applicant who is completing courses at this or another institution and for whom final and complete transcripts are not yet available may be granted



Faculty of Education (cont'd)

provisional acceptance to the program to which he/she is applying pending the receipt of final transcripts. This provisional acceptance will remain valid until final transcripts are received. Deadline for receipt of final transcripts is June 15th. A provisionally accepted applicant may be granted a final acceptance upon review of the final transcript by the Selections Committee. The Faculty reserves the right to deny admission to an applicant who, in the opinion of the Selections Committee, is deemed unsuitable for admission to a program.

4. A student who has been admitted to a program in the Faculty of Education requiring a teaching internship is advised that he/she may be assigned to any Provincial school district and is responsible for all travel and accommodation costs associated therewith.
5. A student who has been admitted to a particular degree program offered by the Faculty of Education and who wishes to change to another degree program within the Faculty must submit a new Faculty application online within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin) that will be considered in competition with other applicants.
6. In special circumstances, the Committee on Undergraduate Studies, on recommendation from the Admissions Committee may, at its discretion, consider an applicant or group of applicants as an exception to the requirements.
7. A student who declines an offer of admission to the Faculty of Education, withdraws from the program, or who does not register for courses during the academic year in which admission is granted must, if he/she wishes to be subsequently considered for admission, submit a new application in competition with other applicants.
8. An unsuccessful applicant has the right to appeal the decision of the Admissions Committee not to offer him/her a place, if it is felt by the applicant that the decision was reached on grounds other than those specified under the **Admission/Readmission Regulations for the Faculty of Education**. The appeal should be made in writing within twenty-one days of the notification of the decision and should be directed to the Dean of Education. The letter should state clearly and fully the grounds for the appeal. If the Dean of Education, in consultation with the Registrar, judges the grounds to be sufficient, the formal appeals mechanism will be initiated. Normally, appeals will only be considered in the case of procedural error and/or receipt of new information that is relevant to the application. An applicant is advised to refer to **UNIVERSITY REGULATIONS - \_General Academic Regulations (Undergraduate) - \_Appeal of Decisions** section of the University Calendar.
9. The Faculty of Education does not require criminal record checks or other screening procedures as a condition of admission to programs.

Faculty of Education (cont'd)

A student should, however, be aware that such record checks or other screening procedures are required by school districts/schools that host education students. Such agencies will not accept a student without a clear criminal record check or other screening procedure, which would prevent the student from completing a required component of the program. As a result, such a student may not be eligible for promotion or graduation.

It is the responsibility of the student to have such procedures completed as required and at his/her own expense. The Faculty of Education expects a student to provide evidence of a clear criminal record check before he/she is assigned to a school.

The screening procedures of any given agency may change from time to time and are beyond the control of the University.

10. The letter of acceptance to the Bachelor of Education (Intermediate/Secondary), Bachelor of Education (Intermediate/Secondary) Conjoint with the Diploma in Technology Education, Bachelor of Music Education as a Second Degree, Bachelor of Education (Primary/Elementary) as a Second Degree, Bachelor of Education (Primary/Elementary) as a Second Degree Conjoint with Certificate in STEM Education, and Bachelor of Education (Post-Secondary) as a Second Degree will give the successful applicant 14 days from the date of the letter of notification in which to confirm acceptance of the placement offer. The signed Accept/Decline Form indicating acceptance of the offer must be accompanied by a deposit of \$150 which will be credited towards tuition fees. The deposit will be forfeited if the applicant subsequently declines the offer or fails to register. If no reply is received within 14 days, the offer by the Faculty will be withdrawn and the applicant will be informed of this by letter.”

Page 96, 2018-2019 Calendar, under the heading 8.6 Bachelor of Education (Primary/Elementary) as a Second Degree, amend the section as follows:

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

~~This program is currently under review and the program’s timeline is subject to change including a possible Fall commencement in the 2019-20 academic year. For further information contact the [Office of Undergraduate Programs](#). The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office.~~

Faculty of Education (cont'd)

1. For application deadlines refer to the [Application Deadline Dates](#) table.
2. Consideration will be given to the courses for which an applicant is registered at the time of assessment of applications. An applicant who has attended institutions other than Memorial University of Newfoundland must supply transcripts indicating Fall semester grades by February 1.
3. To be considered for admission to the Bachelor of Education (Primary/Elementary) as a Second Degree program, an applicant must have:
  - a. been awarded a Bachelor's Degree, or approved (prior to program startup) for the award of a Bachelor's Degree from a university recognized by Memorial University of Newfoundland;
  - b. achieved a cumulative average of at least 65% or an average of at least 65% on the last attempted 30 credit hours;
  - c. completed a minimum of:
    - 6 credit hours in English - ESL courses cannot be used to satisfy this requirement;
    - 6 credit hours in Mathematics or 3 credit hours in Calculus;
    - 6 credit hours in Psychology;
    - the former Science 1150 and 1151; or 9 credit hours from 3 separate Science areas, 6 credit hours of which must have a laboratory component. Chemistry 1900 may be used to satisfy 3 credit hours of the laboratory requirement. The science areas are: Biochemistry, Biology, Chemistry, Earth Sciences, Environmental Science, Ocean Sciences, Physics; or a Focus Area in Science;
    - 6 credit hours in any combination to be chosen from: Anthropology, Archaeology, Economics, Folklore, Geography, History, Linguistics, Political Science, Religious Studies, Sociology;
    - 6 credit hours in French (recommended) or 6 credit hours in a single language other than English, or demonstration of equivalent competency in a second language; and
    - the equivalent of a completed focus area as per [Table 6 Focus Areas for Bachelor of Education \(Primary/Elementary\)](#) or the completion of a major or minor within the initial Bachelor's degree program in a subject area classified as a focus area.

An applicant with French as a Focus Area must apply under the French as a Second Language Option ~~have written the DELF Tout Public (Level B2) and achieved an overall grade of at least 70%, with no less than 60% in any~~

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~~one skill area of the exam. An applicant must also have completed at least 4 weeks at an approved Francophone institution in a French speaking area or have acquired equivalent work experience in a Francophone environment.~~

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

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

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

Page 102, 2018-2019 Calendar, under the heading **9.5 Bachelor of Education (Primary/Elementary) as a First Degree**, amend **Table 6 Focus Areas for Bachelor of Education (Primary/Elementary)**, as follows:

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

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

<ul style="list-style-type: none"> <li>• <b>English (24 credit hours)</b></li> <li>• 6 credit hours in English at the 1000 level</li> <li>• English 2390 or 3395</li> <li>• 3 credit hours chosen from English 2000, 2001, 2005-2007, 3200, 3201, 3205</li> <li>• 3 credit hours chosen from English 2002-2004, 2010 or the former 2020, 2350, 2351</li> <li>• 6 credit hours chosen from English 2146, 2150, 2151, 2155, 2156, 2160, 3145, 3147-3149, 3152, 3155-3158</li> <li>• 3 additional credit hours in English at the 2000 level or above</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Folklore (24 credit hours)</b></li> <li>• Folklore 1000</li> <li>• Folklore 2100, 2300, 2401, 2500</li> <li>• 9 credit hours in Folklore at the 3000 or 4000 level</li> </ul>
<ul style="list-style-type: none"> <li>• <b>French (24 <del>36</del> credit hours)</b></li> <li>• <u>The equivalent of a major in French with a maximum of 6 credit hours at the 1000 level</u></li> <li>• <u>An average of at least 65% in the 36 credit hours</u></li> <li><del>• French 2100 or equivalent</del></li> <li><del>• French 2101 or equivalent</del></li> <li><del>• French 2300 or equivalent</del></li> <li><del>• 6 credit hours chosen from French 2601, 2602, 2900 or equivalent</del></li> <li><del>• French 3100 or French 3101 or equivalent</del></li> <li>• At least <del>four</del> <u>eight</u> weeks at an approved Francophone institution in a French-speaking area or have acquired equivalent work experience in a Francophone environment.</li> <li><del>• Additional credit hours in French, if needed, to bring the total to 24.</del></li> </ul> <p>It is recommended that a student complete at least one of French 2900, 3650, 3651, 3653, 3654.</p> <p>An applicant with French as focus area must have written the <a href="#"><u>DELF</u></a> Tout Public (Level B2) and achieved an overall grade of at least 70%, with no less than 60% in any one skill area of the exam.</p>	<p><b>Geography (18 credit hours)</b> Geography 1050, 2001, 2102, 2195, 2302, and 2425</p>

Page 104, 2018-2019 Calendar, under the heading 9.6 Bachelor of Education (Primary/Elementary) as a Second Degree, amend the section as follows:

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

~~This program is currently under review and the program’s timeline is subject to change including a possible Fall commencement in the 2019-20 academic year. For further information contact the [Office of Undergraduate Programs](#). The Grenfell Campus offering of this program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office.~~

- The Bachelor of Education (Primary/Elementary) as a Second Degree is a 72 credit hour program intended for students who have completed an appropriate Bachelor’s degree. This program is offered in a five ~~four~~ semester ~~(16-month)~~, full-time format and commences in the Fall ~~Spring~~-semester of each year.
- In addition to meeting these regulations, students must also meet [UNIVERSITY REGULATIONS - General Academic Regulations \(Undergraduate\) - Second Degree](#).
- The Bachelor of Education (Primary/Elementary) as a Second Degree requires 72 credit hours normally completed in the academic terms, sequence, and course load as set out in [Table 8 Bachelor of Education \(Primary/Elementary\) as a Second Degree](#).

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

<b>Fall-Spring - Semester 1 (Professional Year) Learning and Teaching Learners</b>	<b>Winter <del>Fall</del> - Semester 2 (Professional Year) Learning and Teaching Curriculum</b>	<b>Intersession <del>Winter</del> - Semester 3 Learning and Teaching Integration</b>	<b>Fall Spring - Semester 4 Learning and Teaching Frameworks</b>	<b>Winter – Semester 5 Learning and Teacher Identity</b>
<ul style="list-style-type: none"> <li><del>• ED 3120</del></li> <li><del>• ED 3273</del></li> <li>• ED 3312</li> <li><del>• ED 3618</del></li> <li><del>• ED 3951</del></li> <li>• ED 3962</li> <li>• <u>HKR 2001</u></li> <li>• <u>ED 3617</u></li> <li>• <u>ED 4240</u></li> <li>• <u>ED 4381</u></li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 401T</u></li> </ul>	<ul style="list-style-type: none"> <li>• ED 3322</li> <li>• <u>ED 3273</u></li> <li>• ED 3962</li> <li>• <u>ED 4242</u></li> <li><del>• ED 3484</del></li> <li><del>• ED 3543</del></li> <li><del>• ED 3619</del></li> <li>• ED 3940</li> <li><del>• ED 4240</del></li> <li>• Non credit field experience (ten days)</li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 402T</u></li> </ul>	<ul style="list-style-type: none"> <li><del>• ED 401X</del></li> <li><del>• ED 4425</del></li> <li>• <u>ED 3120</u></li> <li>• <u>ED 4391</u></li> <li>• <u>ED 3574</u></li> <li>• <u>ED 2051</u></li> <li>• <u>ED 4206</u></li> <li>• <u>ED 3566</u></li> </ul>	<ul style="list-style-type: none"> <li>• ED 3131</li> <li><del>• ED 3952</del></li> <li><del>• ED 4362</del></li> <li><del>• ED 4383</del></li> <li><del>• 3 credit hours in an Education Elective</del></li> <li><del>• Human Kinetics and Recreation 2001</del></li> <li>• <u>ED 3942</u></li> <li>• <u>ED 3274</u></li> <li>• <u>ED 3953</u></li> <li>• <u>ED 3543</u></li> <li>• <u>ED 3212</u></li> <li>• <u>ED 3151</u></li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 403T</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>ED 404T</u></li> <li>• <u>ED 4427</u></li> <li>• <u>ED 5001</u></li> </ul>

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

- The Bachelor of Education (Primary/Elementary) as a Second Degree, French as a Second Language Immersion Option, is a 75 72 credit hour program intended for students who have completed an appropriate Bachelor's degree. This program is offered in a five four semester (plus August institute) (16 month), full-time format and commences in the August Spring semester of each year.
- A student will normally attend full-time and complete the required 75 72 credit hours in the academic terms, sequence, and course load as set out in [Table 9 Bachelor of Education \(Primary/Elementary\) as a Second Degree, French as a Second Language Immersion Option.](#)
- In addition to meeting these regulations, students must also meet [UNIVERSITY REGULATIONS - General Academic Regulations \(Undergraduate\) - Second Degree.](#)

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

<u>Three-week August Institute</u>	<u>Fall-Spring - Semester 1 (Professional Year)-Learning and Teaching Learners</u>	<u>Winter Fall - Semester 2 (Professional Year)-Learning and Teaching Curriculum</u>	<u>Interession Winter - Semester 3 Learning and Teaching Integration</u>	<u>Fall Spring - Semester 4 Learning and Teaching Frameworks</u>	<u>Winter – Semester 5 Learning and Teacher Identity</u>
• <u>ED 4155</u>	<ul style="list-style-type: none"> <li>• <u>ED 3120</u></li> <li>• <u>ED 3273</u></li> <li>• <u>ED 3312</u></li> <li>• <u>ED 3618</u></li> <li>• <u>ED 3962</u></li> <li>• <u>ED 4155</u></li> <li>• <u>ED 3617</u></li> <li>• <u>ED 4240</u></li> <li>• <u>ED 4381</u></li> <li>• <u>HKR 2001</u></li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 401T</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>ED 3050</u></li> <li>• <u>ED 3322</u></li> <li>• <u>ED 3543</u></li> <li>• <u>ED 3619</u></li> <li>• <u>ED 3940</u></li> <li>• <u>ED 3951</u></li> <li>• <u>Non-credit field experience (ten days) in an approved French Immersion School</u></li> <li>• <u>ED 3273</u></li> <li>• <u>ED 3962</u></li> <li>• <u>ED 4242</u></li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 402T</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>ED 401X in an approved French Immersion School</u></li> <li>• <u>ED 4425</u></li> <li>• <u>ED 3120</u></li> <li>• <u>ED 4391</u></li> <li>• <u>ED 3574</u></li> <li>• <u>ED 2051</u></li> <li>• <u>ED 4206</u></li> <li>• <u>ED 3566</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>ED 3131</u></li> <li>• <u>ED 3952</u></li> <li>• <u>ED 4240</u></li> <li>• <u>ED 4362</u></li> <li>• <u>ED 4383</u></li> <li>• <u>Human Kinetics and Recreation 2001</u></li> <li>• <u>ED 3942</u></li> <li>• <u>ED 3274</u></li> <li>• <u>ED 3953</u></li> <li>• <u>ED 3543</u></li> <li>• <u>ED 3050</u></li> <li>• <u>ED 5001 (non-credit)</u></li> <li>• <u>ED 403T</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>ED 404T</u></li> <li>• <u>ED 4427</u></li> <li>• <u>ED 5001</u></li> </ul>



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Page 108, 2018-2019 Calendar, under the heading 17 Course Descriptions, amend the section as follows:

**“17 Course Descriptions**

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

All courses of the Faculty are designated by ED.

- **Legend:**
- **ACP:** Courses for students in the Aboriginal Community Based programs
- **AL:** Courses for students in the [Adult Learning and Post-Secondary Education](#) program
- **IS:** Courses for students in the [Intermediate/Secondary](#) program
- **ISI:** Courses for students in the [Intermediate/Secondary Conjoint with the Technology Education](#) program
- **ME:** Courses for students in the [Music Education](#) program
- **PE:** Courses for students in the Primary/Elementary programs
- **PS:** Courses for students in the Post-Secondary Education programs
- **SE:** Courses for students in the [Special Education](#) program
- **ST:** Courses for students in the [Bachelor of Education \(Primary/Elementary\) as a Second Degree Conjoint with Certificate in STEM Education](#) program

**2051 Learning Through Drama (PE)** is an experiential drama education course that will offer students a broad introduction to the potential for using and incorporating drama education in learning experiences and in cross-curricular teaching.

CH: 1

**Abbreviated Course Title:** Learning Through Drama

**3050 The Teaching of French as a Second Language in the Primary and Elementary Grades (ME,PE)** is an introduction to the general principles of second-language teaching, to the curriculum materials currently prescribed for use in the schools, and to a consideration of teaching strategies and evaluation techniques associated with these materials.

OR: for students completing the Bachelor of Education (Primary/Elementary) as a Second Degree, French Immersion Option this course will be taught in French

PR: French 2101



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**3120 Foundations of Art Education (ME,PE)** develops an understanding of art in relation to current theories of education and art education and to provide individual exploration of an experience in appropriate techniques. Curriculum will be examined with the focus on understanding how to provide favourable conditions and experiences for high quality individual development in visual expression.

CR: the former ED 2020, the former ED 3110, the former ED 3112

**3131 Music Education in the Primary/Elementary Grades (PE)** is designed to provide the prospective primary/elementary classroom teacher with the knowledge, skills and understandings necessary for presenting basic music concepts and skills to students and for using music as a means for teaching or enriching other areas of the curriculum. Course work will include study in the three facets of general classroom music: scholarship of the discipline, musicianship, and classroom methodology.

CR: former ED 3130

UL: not applicable towards the Conjoint Degrees of Bachelor of Music and Bachelor of Music Education or the Bachelor of Music Education as a Second Degree

**3151 Multilingualism in the Classroom (PE)** is a course whose is to introduce pre-service teachers to the needs of students whose first language is not English in the primary/elementary classroom. Emphasis will be placed on the development of language skills in English, issues associated with reading and writing in an additional language and cultural sensitivity in multilingual classrooms.

CH: 1

**Abbreviated Course Title:** Multilingualism in the Class

**3212 Counselling Issues and Career Development (PE)** is a course whose goal is to highlight prevalent presenting social and developmental issues that are experienced by school-age children, some of which may require collaborative cooperation with guidance counselling colleagues. The course will seek to understand the primary-elementary students' experiences from a holistic lens. Students will engage with content that focuses on developmental and social dynamics that inform student health and functioning, hence impacting school and academic engagement and career development.

CH: 2

**Abbreviated Course Title:** Counselling Iss and Career Dev

**3274 Infusing STEM into Primary/Elementary Grades (PE)** will focus on the nature of STEM (Science, Technology, Engineering, and Mathematics) and how to infuse STEM into the K-6 curriculum, with a

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particular emphasis on the inquiry, design process, integrated curriculum, and technology. Teacher candidates will have opportunities to explore several frameworks to support integrated curriculum and plan and implement STEM-infused learning experiences.

CH: 1

PR: ED 3273, ED 3940

**Abbreviated Course Title:** Infus STEM P/E

**3273 Science in the Primary/Elementary Grades (PE)** is a practical course designed to develop approaches to Science teaching based on student investigation of scientific phenomena. Examples are drawn from both provincial and other major curricula.

CR: the former ED 2180, the former ED 3270, the former ED 3275

**3312 Language Arts in the Primary/Elementary School I (PE)** provides students with a holistic view of the learning and teaching of language arts (i.e., the receptive language abilities of viewing, listening and reading, and the expressive language abilities of speaking and writing). This course will help students develop a theoretical perspective on two major aspects of language, that being "knowledge of language" (i.e., knowledge of the structures of language) and "knowledge about language" (i.e., knowledge about attitudes and perceptions towards language and the various purposes of language). This course will extend students' understanding of the importance of the home/community influences upon emergent and developmental literacy and language development.

CR: the former ED 2210, the former ED 2220, the former ED 3305, the former ED 3315

**3322 Children's Literature in the Primary/Elementary School (PE)** focuses on the personal and educational values for using children's literature in the classroom, examines the literary genres appropriate for primary/elementary children and explores meaningful literacy extensions to develop children's literacy strategies and skills. In addition, the course examines guidelines for evaluating children's literature for literacy and aesthetic qualities. Instructional strategies to integrate children's literature across the curriculum are explored.

CR: the former ED 2060, the former ED 2065, the former ED 3310, the former ED 3320

**3543 Language Arts in the Primary/Elementary School II (PE)** provides students with a social-psychological perspective on children's learning to read, reading and reading to learn. Students will explore current and traditional models of the reading process and the importance of home/school/community contexts for fostering literacy learning.

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Students will apply instructional strategies for children's learning of story, book and print concepts, word identification, fluency, vocabulary development and comprehension for a variety of texts.

CR: the former ED 2110, the former ED 2120, the former ED 3540, the former ED 3542, the former ED 3545

PR: ED 3312

**3566 Affirmative Sexuality and Gender Pedagogy in Education Matters (PE)** aims to increase pre-service teacher awareness, skill and knowledge with respect to diverse gender and sexuality affirmative practices and pedagogy in the context of educational environments. The course will briefly explore the history of queer, trans\*(umbrella term) and two spirit students, families and teacher-educators in educational settings. Affirmative practice with gender and sexuality diverse folks will be explored in the classroom and in teacher practices as an ethic of care.

CH: 1

**Abbreviated Course Title:** Affirm Sex/Gen Ped in Ed

**3574 An Introduction to Indigenous Education (PE)** is a course where students will engage in critically examining the challenges of bringing together Indigenous and Western knowledge systems and consider the various models of education that co-construct teaching and learning. Students will gain the pedagogical knowledge and skills to blend Indigenous ways of knowing and doing within the K-12 provincial curricula.

CH: 1

**Abbreviated Course Title:** Intro Indigenous Education

**3617 Children and Learning (PE)** provides an introduction to psychological theories of learning and motivation, and development. The focus is on typical development with some attention to atypical functioning (exceptionality) where appropriate. Emphasis will be placed upon the application of this knowledge to classroom practice, instruction, and the facilitation of learning.

**Abbreviated Course Title:** Children and Learning

**3940 Mathematics in Primary and Elementary Grades (ME,PE)** is a general overview of aspects of teaching Mathematics in the primary and elementary grades. Theories of child development as they relate to Mathematics teaching, characteristics of Mathematics topics in primary and elementary grades, and the implications for teaching will be the major topics to be discussed in this course.

CR: the former ED 2340, the former ED 2310, the former ED 2320

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**3942 Teaching and Learning Elementary Mathematics (PE)** provides students with an opportunity to explore beliefs about the nature of mathematics and to consider how to teach mathematics for, and with, understanding, with a focus on elementary children. Building upon Education 3940, students will focus on the unique developmental characteristics, beliefs, behaviours and learning needs of elementary children in mathematics. Students will also engage in mathematical practice so they have a shared basis for discussion of particular mathematical topics that appear within the curriculum.

CH: 2

PR: ED 3940

**Abbreviated Course Title:** Teach and Learn Elem Math

**3953 Assessment for Learning in the Primary/Elementary Grades (PE)** is an introduction to the theory and practice of evaluating student learning in the classroom. Topics include the characteristics of classroom assessment; the relationship among assessment, curriculum, and instruction; formative assessment; summative assessment; development, administration, interpretation, and evaluation of assessment activities including teacher-made tests, performance-based tasks, and portfolios; assessment for students with exceptional needs; assessment for culturally and linguistically diverse students; grading and reporting progress; and the interpretation and use of assessment information.

**Abbreviated Course Title:** Assessment for Learning P/E

**3962 Social Studies in the Primary/Elementary School (PE)** is an introduction to the social studies program at the primary/elementary school level. Topics to be explored include the nature and purposes of the social studies curricula, approaches to teaching and learning in this curricula area, selecting and utilizing learning resources, and conducting assessment in the social studies.

**CR:** the former ED 2160, the former ED 3960

**401T Introductory Field Experience in the Primary and Elementary School I (PE)** is a 5 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focuses on key learning experiences and graduated responsibilities related to professional teaching. It may include both observation periods and initial teaching experiences.

AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.

CH: 0

**Abbreviated Course Title:** Intro Field Exp P/E I

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**402T Introductory Field Experience in the Primary and Elementary School II (PE)** is a 10 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focuses on key learning experiences and graduated responsibilities related to professional teaching. It may include both observation periods and initial teaching experiences.

AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.

CH: 0

PR: 401T

**Abbreviated Course Title:** Intro Field Exp P/E II

**403T Introductory Field Experience in the Primary and Elementary School III (PE)** is a 10 (consecutive) school day teaching and learning experience, framed by explicit guidelines, that focuses on key learning experiences and graduated responsibilities related to professional teaching. It may include both observation periods and initial teaching experiences.

AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.

CH: 0

PR: 402T

**Abbreviated Course Title:** Intro Field Exp P/E III

**404T Extended Teaching Internship (PE)** is a 50 day teaching and learning experience, framed by explicit guidelines, designed to provide students an opportunity to integrate theory and practice in the school classroom. It includes both observation periods and extensive teaching experiences. The internship is intended to help students develop their individual style of teaching, to enable students to recognize the scope and complexity of a classroom teacher's roles and responsibilities, and to provide opportunities for the study of children as individuals and in groups, both in the classroom and other school settings.

AR: Attendance is required. With respect to holidays, interns follow the schedule of the school and not that of the University.

CH: 12

OR: students may not be placed in the first school of choice and may be assigned to another appropriate school

PR: ED 403T and successful completion of semesters one to four of the Bachelor of Education (Primary/Elementary) as a Second Degree. Students must have successfully completed ED 4155 and ED 3050 to be assigned to a French Immersion classroom.

**Abbreviated Course Title:** Extended Teaching Internship

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**4155 Introduction to Teaching in French Immersion in the Primary and Elementary Grades (ME,PE)** is an overview of the development of French Immersion programs and an examination of current models for organization and instruction of French at the primary and elementary levels. This course will focus on methods and strategies for content-based teaching in immersion, integrating the formal aspects of French language teaching into content-based teaching and integrating culture, strategy training and language awareness into immersion curricula. Additional topics will include assessment of/for learning and effective technology integration in French Immersion.

OR: this course will be taught in French

PR: acceptance to the French Immersion Option or permission of the Office of Undergraduate Programs

**4206 Teaching Religious Education in the Primary and Elementary Grades (PE)** is an introductory study of objectives, subject matter, curriculum materials, teaching methods and evaluation for primary/elementary Religious Education courses when teaching/learning from a multi-faith perspective in a pluralistic society.

CH: 1

**Abbreviated Course Title:** Religious Ed P/E Grades

**4240 An Introduction to the Exceptional Learner (IS,ISI,ME,PE)** is an introduction to the nature of exceptionality in the student. Topics include an examination of special needs resulting from exceptionality, approaches to meeting the special needs, issues of exceptionality, and a consideration of selected categories of exceptionality.

CR: the former ED 3220, the former 3230, the former ED 4902

**4242 Identification and Remediation of Learning Difficulties (IS,ISI,PE)** examines the identification processes and remediation techniques appropriate for dealing with student learning difficulties. Topics include identification of learning difficulties, the process of program planning, and the application of teaching and learning strategies to specific subject areas.

PR: ED 4240 or the former 3220 or 3230

**4381 Perspectives on Education (IS, ISI, ME, PE)** examines educational theory, practice and policy from the disciplinary perspectives of philosophy, sociology, history and/or comparative education. Its aim is to foster an appreciation of the intrinsic value of these specific forms of inquiry as contributions to contemporary understanding of educational enterprise. Topics include: ethical and epistemological considerations related to areas such as critical pedagogy, equal educational opportunity, educational reform, change and social justice.

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**4391 Social Justice, Equity and Education: An Introduction (PE)** offers students an introduction to concepts and issues of social justice and equity as they relate to school and classroom culture and effective teaching and learning. Students will examine the basis of social inequity and its effects in education locally and worldwide, explore meanings of social justice and determine its importance as an educational priority, and review and develop curriculum, pedagogy and policies to build more equitable and just classrooms and school communities.

CH: 2

**Abbreviated Course Title:** Soci Justice/Equity/Ed Intro

**4427 Professional Leading and Learning in the School Organization (IS, ISI, PE)** explores the theory and practice of school organization and its effect on teaching and learning and provides opportunities for teacher candidates to become reflective learners and teacher leaders. Topics include: parents and families, communities and schools; law and education; resources in education; policy and politics; teacher leadership, school and system administration; and the teaching profession.

CR: ED 4425

**5001 The Teacher Development Seminar for Primary/Elementary (PE)** provides teacher candidates with an opportunity to frame, conceptualize and articulate educational issues; (re)consider the purposes of education; reflect on teaching and learning; and develop and display artifacts that document learning, professional knowledge and practice, and teacher identity. Teacher candidates are expected to participate in a series of critical reflective seminars and workshops, and to create an electronic portfolio (e-portfolio). Topics include: critical reflection, professionalism and teacher identity, educational technology, social/emotional/mental health and student and school safety.

AR: attendance is required

OR: seminars, workshops and other professional development sessions

**Abbreviated Course Title:** Teacher Dev Sem P/E”

Page 162, 2018-2019 Calendar, under the heading 5.1.3 Education Degree, amend the section as follows:

**5.1.3 Education Degree**

The ~~Bachelor of Education (Primary/Elementary) as a Second Degree~~ is offered under the School of Arts and Social Science.

The Bachelor of Education (Primary/Elementary) as a Second Degree is a 72 credit hour program intended for students who have completed an appropriate Bachelor's degree. This program is offered in a four semester

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~~(16 month), full-time format and commences in the Spring semester of each year. The student will learn about child development, diverse learners and much more. For specific admission and program requirements see [Admission/Readmission Regulations for the Faculty of Education, \(Bachelor of Education \(Primary/Elementary\) as a Second Degree](#) and [Program Regulations, Bachelor of Education \(Primary/Elementary\) as a Second Degree](#).~~

The Grenfell Campus offering of the Bachelor of Education (Primary/Elementary) as a Second Degree program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office, Faculty of Education.

Page 166, 2018-2019 Calendar, under the heading 6.2.4 Bachelor of Education (Primary/Elementary) as a Second Degree, amend the section as follows:

**“6.2.4 Bachelor of Education (Primary/Elementary) as a Second Degree**

~~Admission/readmission regulations for the [Bachelor of Education \(Primary/Elementary\) as a Second Degree](#) can be found at [Admission/Readmission Regulations for the Faculty of Education, Bachelor of Education \(Primary/Elementary\) as a Second Degree](#).~~

The Grenfell Campus offering of the Bachelor of Education (Primary/Elementary) as a Second Degree program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office, Faculty of Education.”

Page 182, 2018-2019 Calendar, under the heading 7.2.8 Bachelor of Education (Primary/Elementary) as a Second Degree, amend the section as follows:

**“7.2.8 Bachelor of Education (Primary/Elementary) as a Second Degree**

[www.grenfell.mun.ca/education](http://www.grenfell.mun.ca/education)

~~Information regarding program requirements for the [Bachelor of Education \(Primary/Elementary\) as a Second Degree](#) is located at [Faculty of Education, Program Regulations, Bachelor of Education \(Primary/Elementary\) as a Second Degree](#).~~



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The Grenfell Campus offering of the Bachelor of Education (Primary/Elementary) as a Second Degree program is currently under review and may not be available for intake at this time. For further information please contact the Academic Programs Office, Faculty of Education.”

54.4 Faculty of Engineering and Applied Science

It was moved by Professor Fisher, seconded by Dr. Naterer, and carried that the following calendar changes be approved.

Page 119, 2018-2019 Calendar, under the heading 4.1 Program of Study, amend the section as follows:

**“4.1 Program of Study**

6. Upon entering Academic Term 6, students in the Computer Engineering and Electrical Engineering majors may choose to enter the Biomedical stream. Upon entering Academic Term 6, students in the Mechanical Engineering major ~~may~~ choose one of ~~four~~five technical streams: Biomedical, Mechanics and Materials, Mechatronics, Petroleum, and Thermo-Fluids. Upon entering Academic Term 6, students in the Process Engineering major may choose one of two technical streams: Petroleum and Process.”

Page 120, 2018-2019 Calendar, under the heading 4.3.2 Computer Engineering, amend the section as follows:

**“4.3.2 Computer Engineering**

[www.mun.ca/engineering/ece](http://www.mun.ca/engineering/ece)

Computer Engineering is the design and analysis of computer systems applied to the solution of practical problems. It encompasses both hardware and software design in applications ranging from telecommunications and information systems to process control and avionics. Computer Engineering students learn the mathematics of discrete and continuous systems, the design of digital machines such as processors and memories, the fundamentals of software design, and the principles used in communications systems such as telephone networks and the Internet.

Computer Engineering shares many fundamentals with Electrical Engineering, which are covered in a common curriculum up to and including Academic Term 3. In recognition of the considerable

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diversity of careers available to computer engineers, students are given latitude in the final three academic terms to choose from a wide range of electives in various specialty areas. In Academic Term 6, students may choose to enter the Biomedical stream which provides focus on electives relevant to the field of biomedical engineering. Making use of their elective course choices, students in the Computer Engineering major also have the opportunity to undertake a minor in Physics.”

Page 120, 2018-2019 Calendar, under the heading 4.3.3 Electrical Engineering, amend the section as follows:

**“4.3.3 Electrical Engineering**

[www.mun.ca/engineering/ece](http://www.mun.ca/engineering/ece)

Electrical Engineering is a broad field encompassing the study of control systems, electromagnetics and antennas, power systems, electronics, communications, and computer hardware and software.

Electrical Engineering shares many fundamentals with Computer Engineering, which are covered in a common curriculum up to and including Academic Term 3. In recognition of the considerable diversity of careers available to electrical engineers, students are given latitude in the final three academic terms to choose from a wide range of electives in various specialty areas. In Academic Term 6, students may choose to enter the Biomedical stream which provides focus on electives relevant to the field of biomedical engineering. Making use of their elective course choices, students in the Electrical Engineering major also have the opportunity to undertake a minor in Physics.”

Page 120, 2018-2019 Calendar, under the heading 4.3.4 Mechanical Engineering, amend the section as follows:

**“4.3.4 Mechanical Engineering**

[www.mun.ca/engineering/mech](http://www.mun.ca/engineering/mech)

Mechanical Engineering is a highly diversified discipline encompassing the design, analysis, testing and manufacture of products that are used in every facet of modern society. Mechanical engineers analyse and design using the principles of motion, energy, and force to ensure that the product functions safely, efficiently, reliably, and can be manufactured at a competitive cost. This activity requires a thorough knowledge of materials, mathematics, and the physical sciences, and an ability to apply this knowledge to the

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synthesis of economical and socially acceptable solutions to engineering problems.

Mechanical Engineering is designed to provide students with a knowledge in the following four areas: design and dynamics, emphasizing solid mechanics, material science, dynamics, vibrations and machine component design; thermo-fluids, focussing on thermodynamics, heat transfer and fluid mechanics; mechatronics, dealing with electro-mechanical systems, control, robotics, and automation; and manufacturing/industrial, which encompasses CAD/CAM, production and operation management. In Academic Term 6, students ~~may~~ select one of ~~four~~ **five** Technical Streams, which provide focus to the wide range of electives in various specialty areas in Academic Terms 7 and 8.”

Page 125, 2018-2019 Calendar, under the heading 6.2.1 Computer Engineering Major, amend the section as follows:

**“6.2 Computer Engineering Program Regulations**

**6.2.1 Computer Engineering Major**

- The full-time 141 credit hour Bachelor of Engineering (Co-operative), Computer Engineering Major, requires eight academic terms and four work terms.
- The 141 credit hours shall normally be taken in the academic terms and order as set out in **Table 2 Computer Engineering Major**.
- Work terms shall normally be taken in the order as set out in **Table 2 Computer Engineering Major**.
- The requirements for a minor in Physics in the Computer Engineering program are detailed under **Faculty of Science, Minor in Physics**. Students wishing to undertake a minor in Physics must obtain approval from the Head of the Department of Electrical and Computer Engineering for their course selection.

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**Table 2 Computer Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Fall Academic Term 6</b>	ENGI 6861 ENGI 6871 ENGI 6876 ENGI 6893	<p><b><u>Students in the Biomedical Stream:</u></b>  <u>Human Kinetics and Recreation 2311</u></p> <p><b><u>All other students:</u></b>            3 credit hours from: ENGI 6855 or other courses as specified by the Head of the Department of Electrical and Computer Engineering</p>
<b>Winter</b>	003W or 004W or 005W (optional)	
<b>Spring Academic Term 7</b>	ENGI 7804 ENGI 7824 ENGI 7894	<p><b><u>Students in the Biomedical Stream:</u></b>  <u>Medicine 6250</u></p> <p><u>3 credit hours from: ENGI 7825, 7854, 7864, 7952, other courses as specified by the Head of the Department of Electrical and Computer Engineering</u></p> <p><b><u>All other students:</u></b>            6 credit hours from: ENGI 7825, 7854, 7864, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering</p>
<b>Fall</b>	004W or 005W (optional) or 006W (optional)	
<b>Winter Academic Term 8</b>	ENGI 8152 ENGI 8854 ENGI 8894	<p><b><u>Students in the Biomedical Stream:</u></b>  <u>Human Kinetics and Recreation 4703</u></p> <p><u>6 credit hours from: ENGI 8814, 8821, 8868, other courses as specified by the Head of the Department of Electrical and Computer Engineering.</u></p> <p><b><u>All other students:</u></b>            One free elective which must be a 3000-level or higher Engineering course, or a 2000-level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Electrical and Computer Engineering.</p> <p>6 credit hours from: ENGI 7680, 8814, 8821, 8863, 8868, 8879, 8801-8805, or other courses as specified by the Head of the Department of Electrical and Computer Engineering.</p>

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Page 126, 2018-2019 Calendar, under the heading 6.3 Electrical Engineering Program Regulations, amend Table 3 Electrical Engineering Major as follows:

**6.3 Electrical Engineering Program Regulations**

**Table 3 Electrical Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Fall Academic Term 6</b>	ENGI 6813 ENGI 6843 ENGI 6855 ENGI 6871	<b><u>Students in the Biomedical Stream:</u></b> <b><u>Human Kinetics and Recreation 2311</u></b>  <b><u>All other students:</u></b> 3 credit hours from: ENGI 6856, 6876, other courses as specified by the Head of the Department of Electrical and Computer Engineering
<b>Winter</b>	003W or 004W or 005W (optional)	
<b>Spring Academic Term 7</b>	ENGI 7803 ENGI 7824	<b><u>Students in the Biomedical Stream:</u></b> <b><u>Medicine 6250</u></b>  <b><u>3 credit hours from: ENGI 7825, 7854, 7952, other courses as specified by the Head of the Department of Electrical and Computer Engineering</u></b>  <b><u>3 credit hours from: ENGI 7811, 7825, 7844, 7854, 7855, 7856, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering</u></b>  <b><u>All other students:</u></b> 9 credit hours from: ENGI 7811, 7825, 7844, 7854, 7855, 7856, 7952, 8680, other courses as specified by the Head of the Department of Electrical and Computer Engineering
<b>Fall</b>	004W or 005W (optional) or 006W (optional)	

Page 128, 2018-2019 Calendar, under the heading 6.4 Mechanical Engineering Program Regulations, amend Table 4 Mechanical Engineering Major as follows:

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**6.4 Mechanical Engineering Program Regulations**

**Table 4 Mechanical Engineering Major**

<b>Term</b>	<b>Required Courses</b>	<b>Elective Courses</b>
<b>Fall Academic Term 6</b>	ENGI 6901 ENGI 6928 ENGI 6929 ENGI 6933 ENGI 6951	<u>Students in the Biomedical Technical Stream must also take HKR 2311 in Academic Term 6.</u>  Students in the Petroleum Technical Stream must also take ENGI 6602 in Academic Term 6.
<b>Winter</b>	003W or 004W or 005W (optional)	
<b>Spring Academic Term 7</b>	ENGI 7926 ENGI 7930	6 credit hours from <b>Technical Stream Required Courses</b> , Academic Term 7 <u>For students in the Biomedical Technical Stream or Stream, one Technical Stream Required Course is replaced by HKR 2311, taken in Academic Term 6.</u> <u>For students in the Petroleum Technical Stream, one Technical Stream Required Course is replaced by ENGI 6602, taken in Academic Term 6.</u> 3 credit hours from <b>Technical Stream Elective Courses</b> <del>For students in the Petroleum Technical Stream, the Technical Elective is replaced by ENGI 6602, taken in Academic Term 6.</del> One free elective which must be a 3000-level or higher Engineering course, or a 2000-level or higher course from any other academic unit. Selection of a course must be approved by the Head of the Department of Mechanical Engineering <u>and must be completed before Academic Term 8.</u>
<b>Fall</b>	004W or 005W (optional) or 006W (optional)	
<b>Winter Academic Term 8</b>	ENGI 8152 ENGI 8926	3 credit hours from <b>Technical Stream Required Courses</b> , Academic Term 8 6 credit hours from <b>Technical Stream Elective Courses</b>

Page 129, 2018-2019 Calendar, under the heading 6.4.1.1 Technical Streams, amend the section as follows:

Faculty of Engineering and Applied Science (cont'd)**6.4.1.1 Technical Streams**

- A student must select one of the Technical Streams ~~are available~~ in the areas of Biomedical, Mechanics and Materials, Mechatronics, Petroleum, and Thermo-Fluids.
- Technical Stream required courses must be chosen according to the student's stream as outlined below in the **Technical Stream Required Courses Table**.
- Technical Stream elective courses must be chosen according to the student's stream as outlined below in the **Technical Stream Elective Courses Table**.

A student must choose one course in Academic Term 7 and two courses in Academic Term 8 according to the student's stream from the **Technical Stream Elective Courses Table** or other courses as approved by the Head of the Department of Mechanical Engineering.

- The selection of a course as a technical stream course from outside these lists requires the approval of the Head of the Department of Mechanical Engineering.

**Technical Stream Required Courses**

Term	<u>Biomedical</u>	Mechanics and Materials	Mechatronics	Petroleum	Thermo-Fluids
Academic Term 6	<u>HKR 2311</u>			ENGI 6602	
Academic Term 7	<u>MED 6250</u>	ENGI 7911 ENGI 7929	ENGI 7929 ENGI 7953	ENGI 8691 <del>ENGI 8692</del>	ENGI 7901 ENGI 7903
Academic Term 8	<u>HKR 4703</u>	ENGI 8933	ENGI 8946	ENGI 8690	ENGI 8903

**Technical Stream Elective Courses**

<u>Biomedical</u>	Mechanics and Materials	Mechatronics	Petroleum	Thermo-Fluids
<u>ENGI 7854</u> <u>ENGI 7934</u> <u>ENGI 7952</u> <u>ENGI 7953</u> <u>ENGI 8814</u> <u>ENGI 8947</u>	ENGI 7934 ENGI 8911 ENGI 8935 ENGI 8937 ENGI 8971 ENGI 8982	ENGI 7825 ENGI 7854 ENGI 7952 ENGI 8814 ENGI 8826 ENGI 8937	ENGI 7903 ENGI 8671 ENGI 8673 ENGI 8676 <u>ENGI 8692</u> ENGI 8694 ENGI 8911 <u>ENGI 8970</u>	ENGI 7934 ENGI 8947 ENGI 8964 ENGI 8965 ENGI 8970 ENGI 8984

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Page 243, 2018-2019 Calendar, under the heading 12 Course Descriptions, amend the section as follows:

**“4703 Occupational Ergonomics and Sport Biomechanics** focuses on the contrast between biomechanical analyses of workplace tasks and athletic movement. Students will conduct a detailed biomechanical analysis of a given movement, in the workplace or for a given sport, with regard to both the probability of injury and optimization of performance.

LH: 2

PR: HKR 2703, 3320, and Physics 1020, or completion of Academic Term 5 of the Bachelor of Engineering program”

Page 122, 2018-2019 Calendar, under the heading 5.2.1 Admission, amend the section as follows:

**“5.2.1 Admission**

~~1. — A student applying for admission to the Bachelor of Engineering program is required to submit an online application. Applications for admission to Engineering One will normally be considered for admission to the Fall semester of each year. The deadline for submission of applications for admission to the Fall semester is March 1. Applications for admission to the Winter and Spring semesters will be considered for applicants who have completed or are completing two or more of the following courses: Mathematics 1000, — Mathematics 1001, — Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080. The deadline for application to the Winter semester is October 1 and to the Spring semester is February 1.~~

1. A student applying for admission to the Bachelor of Engineering program is required to submit an online application.
2. Applications for admission to Engineering One will normally be considered for admission to the Fall semester of each year. The deadline for submission of applications for admission to the Fall semester is March 1. The deadline for receipt of all documents pertaining to an application for the Fall semester is July 31.
3. Applications for admission to the Winter and Spring semesters will be considered for Memorial University of Newfoundland students only, who have successfully completed or are currently registered for two or more of the following courses: Mathematics 1000, Mathematics 1001, Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080. The deadline for application to the



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Winter semester is October 1 and to the Spring semester is February 1.

4. Applications received after the relevant deadline may be considered as time and space permit. The Admissions Committee for the Faculty will only consider applications that are complete.”

Page 123, 2018-2019 Calendar, under the heading 5.3.3 Transfer Applicants, amend the section as follows:

**“5.3.3 Transfer Applicants**

- Transfer applicants are eligible to apply for admission to the Fall semester of Engineering One only, by the deadline of March 1.
- An applicant seeking admission to the Bachelor of Engineering program through transfer from recognized post-secondary institutions must have achieved a minimum overall average of 70% or GPA of 3.0, or equivalent.
- Applicants must have obtained a grade of at least 70% in two or more ~~of the following~~ courses that have been deemed equivalent for transfer credit purposes to: Mathematics 1000, Mathematics 1001, Mathematics 2050, Physics 1050, Physics 1051, Chemistry 1050, English 1090 or the former English 1080.
- Where it is determined, at the time of admission, that an applicant has met all the requirements for promotion from Engineering One, advanced placement in Academic Term 3 or beyond, and requirements needed to complete the program, will be determined on an individual basis following transfer credit evaluation. A transfer applicant must complete a majority of the credit hours in the program at Memorial University of Newfoundland.  
Applicants must meet the English language proficiency requirements as noted in English Language Proficiency Requirements.”

54.5 Department of Archaeology

It was moved by J. Godfrey, seconded by Dr. Hardy Cox, and carried that the following calendar changes be approved with the friendly amendment to move the word “their” from third paragraph under 8.5 Certificate in Indigenous-Aboriginal Studies.

Page 291, 2018-2019 Calendar, under the heading 14.2.6 Major in Archaeology (Co-operative), amend the section as follows:

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### **“14.2.6 Major in Archaeology (Co-operative)**

The Major in Archaeology (Co-operative) Education (ACE) program allows Archaeology students to apply their skills in a variety of settings. The program is available to full-time Archaeology majors only. The student majoring in Archaeology must meet the requirements listed under **Regulations for the General Degree of Bachelor of Arts and First Courses** above. In addition, the ACE Program requires two work term courses, 300W and 400W, as described in **Work Terms**.

The ACE Program is an extension of the ~~existing~~ Bachelor of Arts and Bachelor of Arts Honours programs. The program is administered by ~~Co-operative Education at Memorial University of Newfoundland~~ the designated Academic Staff Member in Co-operative Education (ASM-CE) for the Faculty of Humanities and Social Sciences. With the help of ~~Co-operative Education~~ the ASM-CE and the Department of Archaeology, students will seek placement opportunities within the Province, within Canada, and internationally.

Students who participate in the ACE program must meet the requirements listed under **Regulations for the General Degree of Bachelor of Arts and First Courses** above. In addition, the ACE Program requires two work term courses, 300W and 400W, as described in **Work Terms**.

#### **14.2.6.1 Admission Requirements**

1. Admission to the ACE program is limited, ~~competitive~~ and selective. ~~Prospective students are encouraged to consider alternate degree program(s) in the event that they are not accepted into the ACE program.~~
2. ~~Applicants~~ Students should note that it is possible to apply to enter Term 1 the ACE program only in the Fall semester ~~commencing in September~~ of each academic year. ACE application forms and the application deadline are available ~~online~~ at [www.mun.ca/archaeology/ace](http://www.mun.ca/archaeology/ace) or ~~in the Department of Archaeology Office.~~
3. The primary criterion used in reaching decisions on applications for admission is overall academic achievement. Students with weak overall academic records are unlikely to be admitted. Applicants may be asked to attend an interview.
4. To be eligible for admission to ~~Term 1 the ACE program~~ an applicant a student must have successfully completed a minimum of 30 credit hours with an overall average of at least 65% ~~as follows: a.~~ All applicants must have completed Archaeology 1000 (or the

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former 1030) and 2480 and an Archaeology Field School or Lab School or have significant archaeology experience. It is also advised that students choose courses which can satisfy the requirements for the **Core Requirements** as outlined under **Bachelor of Arts General Degree Components**, including courses in a second language.

5. ~~Students who have already completed more than the 30 credit hours that are required for admission to the program may apply for entry into the program with Advanced Standing. These students will be placed in the term of the program judged to be appropriate considering the number of credit hours. Previous work term and field or laboratory work experience may also be taken into consideration.~~
6. Transfer students from other universities will be placed in the term of the program judged to be appropriate considering equivalent credits, as determined by the Department and the designated ASM-CE.

#### **14.2.6.2 Program of Study**

1. Promotion from each term requires a passing grade in all ~~specified~~ required major courses and an overall average of at least 65% in all courses including electives. A student who fails a required major course ~~or, fails to maintain the overall average of 65% and/or does not maintain full-time status~~ will not be promoted to the next term and will be required to withdraw from the ACE program. ~~The student in question may apply for readmission in a subsequent year after passing the specified required course(s) previously failed, and re-establishing the 65% average.~~
2. In addition to the 30 credit hours required for admission, a student is required to complete a total of 120 credit hours (including a field school or lab school) and two **Work Terms**. A student wishing to change the sequence of the work terms must first consult with the ACE Coordinator, ~~Academic Staff Members Co-operative Education (ASM-CEs)~~ the designated ASM-CEs and receive written approval from the Head of the Department or delegate. ~~A student must complete the program on an academic term.~~
3. A student may wish to follow **Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative)** outlined below under the **Honours in Archaeology (Co-operative)**. A student is encouraged to meet with the Undergraduate Liaison early in the program in order to establish a course pattern that satisfies the regulations for this program.
4. **UNIVERSITY REGULATIONS** -General Academic Regulations (Undergraduate), **Classification of Students** notwithstanding, a student will require permission from the Head of the Department to

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register for courses while on work terms if the courses are in addition to the prescribed program. Normally, work terms are considered equivalent to a full-time employment course load with no time for additional course work.

**14.2.6.3 Work Term Placement**

1. ~~Work terms are not guaranteed but every effort is made to ensure that appropriate employment is made available. In the case of a student who is required to withdraw from the program, Co-operative Education at Memorial University of Newfoundland has no responsibility for placement until the student has been re-admitted to the program.~~ Students are ultimately responsible for securing their work term placements. ASM-CEs provide support for the job search and inform students of potential opportunities.
2. A student who applies for admission to the ~~Co-operative Education~~ ACE program gives permission to the University to provide a copy of the ~~applicant's~~ student's resume, and university transcript ~~and work term evaluations~~ to potential employers.
3. A student is required to complete professional development seminars offered by ~~Co-operative Education~~ the designated ASM-CE.
4. A student who ~~has been accepted to~~ is enrolled in the ACE Program may independently obtain a work term placement outside the competition in consultation with the ASM-CE. Such employment positions must satisfy the criteria for work terms, be confirmed by the employer, and must be approved by the ~~ACE Coordinator and the ASM-CE~~ before the first day of the work term according to the University Diary.
5. ~~The start and end dates for each work term are shown in the University Diary.~~
6. ~~A student is expected to submit, within a month from starting a Work Term, a plan of the intended work that term, following the template provided by the Department of Archaeology.~~
7. ~~Work terms must involve full time work and~~ are normally 12-16 weeks in duration, full-time and paid. Remuneration for work terms are determined by employers based on their internal wage structures.
8. The start and end dates for each work term are shown in the University Diary.

**14.2.6.4 Registration and Evaluation of Performance**

1. In Work Terms 1 and 2, a student must register for Archaeology 300W and 400W respectively.

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2. ~~Student performance evaluations are to be completed by the employer and returned to the ASM-CE.~~ The Work Term evaluations shall consist of two components:

a. **On-the-job Student Performance:**

Job performance shall be assessed by the ASM-CE ~~in consultation with the department~~ using information gathered during the Work Term and input from the employer towards the end of the Work Term. ~~Formal written documentation from the employer shall be sought.~~ Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.

b. **The Work Report Term Assignment(s):**

- ~~• A student is required to submit a Work Term report on the first day of final exams.~~
- ~~• Work Term reports shall be evaluated jointly by the Department and the ASM-CE.~~
- ~~• If an employer designates a report to be of a confidential nature, both employer and the Coordinator must agree as to the methods to protect the confidentiality of such a report before the report may be accepted for evaluation.~~
- ~~• Reports must contain original work related to the Work Term placement. The topic must relate to the work experience and will be chosen by the student in consultation with the employer. The topic must be approved by the ASM-CE in conjunction with the Department of Archaeology. One or more work term assignment(s) as outlined in the course syllabus. Evaluation of the Work Term report work term assignment(s) will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.~~

The evaluation of the job performance and the work term ~~report~~ assignment(s) will result in one of the following final grades being awarded:

- Pass with Distinction: Indicates a classification of OUTSTANDING in both the work ~~report~~ term assignment(s) and the job performance.
- Pass: Indicates a classification of ABOVE EXPECTATIONS, SATISFACTORY, and/or MARGINAL PASS for the work ~~report~~ term assignment(s) and the job performance OR an overall grade of OUTSTANDING in only one of the two components.
- Fail: Indicates a classification of FAIL in the work ~~report~~ term assignment(s) and/or the job performance.

For promotion from the Work Term, a student must obtain at least a Pass in the applicable work term course. Students should also refer

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to the **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate)** of the University. The grades awarded for each work term will be noted on the transcript of the student.

- ~~3. If a student fails to achieve the Work Term standards specified above, the student will be required to withdraw from the program. Such a student may reapply to the program after a lapse of two semesters.~~
4. A student will not be eligible to continue in the ACE program if the student: who withdraws from a Work Term subsequent to a job placement without acceptable cause subsequent to a job placement will be required to withdraw permanently from the Co-operative education program, and/or without prior approval from both the ASM-CE and the Department of Archaeology; Students who drop a Work Term without prior approval from the ACE Coordinator, the ASM-CE, and the Head of the Department of Archaeology, or who fails to honour an agreement to work with an employer; and/or conducts themselves in such a manner as to cause their discharge from the job will normally be awarded a failed grade for the Work Term in question. Permission to drop a Work Term does not constitute a waiver of degree requirements, and students who have obtained such permission must complete an approved Work Term in lieu of the one dropped.

Page 292, 2018-2019 Calendar, under the heading 14.2.7 Honours Major in Archaeology (Co-operative), amend the section as follows:

**“14.2.7 Honours Major in Archaeology (Co-operative)**

**14.2.7.1 Admission Requirements**

See **Major in Archaeology (Co-operative), Admission Requirements**. In addition to the regulations outlined below, a student must also meet the **Program Regulations - General and Honours Degree Bachelor of Arts General Degree**.

**14.2.7.2 Program of Study**

In addition to meeting the requirements for the **Major in Archaeology (Co-operative)**, Honours in Archaeology (Co-operative) students must also meet the following regulations.

1. A student should also refer to the **Bachelor of Arts (Honours) Degree Regulations**. Students intending to complete an Honours program are required to be majors and must complete 60 credit hours

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- in Archaeology including Archaeology 4994 and Archaeology 4995 (or the former Archaeology 4996). In addition, the ACE Program requires two work Term courses, 300W and 400W, as described in **Work Terms**.
2. Promotion from each Term requires an overall average of at least 65% in all courses including electives. A student who fails a required course or fails to maintain an overall average of 65% and/or does not maintain full-time status will not be promoted to the next term and will be required to withdraw from the ACE program. ~~The student in question may be eligible from readmission in the subsequent year after passing the specified required course(s) previously failed.~~ See also **UNIVERSITY REGULATIONS - Regulations for the Honours Degree**.
  3. In addition to the 30 credit hours required for admission, students are required to complete 120 credit hours (including a field school) and two Work Terms. ~~Students~~ A student wishing to change the sequence of the work terms must first consult with the ACE Coordinator, the ASM-CE and receive approval in writing from the Head of the Department or delegate. ~~Students must complete their program on an academic term.~~
  4. **UNIVERSITY REGULATIONS** -General Academic Regulations (Undergraduate), **Classification of Students** notwithstanding, a student will require permission from the Head of the Department to register for courses while on work terms if the courses are in addition to the prescribed program. Normally, work terms are considered equivalent to a full-time employment course load with no time for additional course work.
  5. ~~Students~~ A student may wish to follow **Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative)** outlined below. A student is encouraged to meet with the Undergraduate Liaison early in the program in order to establish a course pattern that satisfies the regulations for this program.

**Table 4 Suggested Course Progression for Major/Honours in Archaeology (Co-operative)**

Year	Courses
Year 1	<ul style="list-style-type: none"> <li>• ARCH 1000 (or the former 1030)</li> <li>• ARCH 2480</li> </ul>
Year 2	<ul style="list-style-type: none"> <li>• 3 credit hours from <b>Group 1 (Core Courses)</b></li> <li>• 6 credits hours from <b>Group 3 (Regional Courses)</b> and/or <b>Group 4 (Topical Courses)</b>.</li> <li>• Students applying for the ACE Program are required to take an Archaeology Field or Laboratory School after their second year of study. The courses associated with the field/lab school include ARCH 2583 or the former 3583</li> </ul>

	(Intersession), ARCH 3585 and ARCH 3586 (Summer Session), and these count towards the Field and Laboratory course requirements - 9 credit hours <b>Group 2 (Field and Laboratory Courses)</b> .
<b>Year 3</b>	<ul style="list-style-type: none"> <li>• 3 credits hours from <b>Group 3 (Regional Courses)</b></li> <li>• Work Term 1</li> </ul>
<b>Year 4</b>	<ul style="list-style-type: none"> <li>• ARCH 4182</li> <li>• ARCH 4411</li> <li>• ARCH 4994 and ARCH 4995 (or the former 4996) - Honours Program only</li> <li>• Work Term 2</li> <li>• 3 credit hours from <b>Group 4 (Topical Courses)</b></li> </ul>

### 14.2.7.3 Work Term Placement

See **Major in Archaeology (Co-operative) Education (ACE)**.

### 14.2.7.4 Registration and Evaluation of Performance

See **Major in Archaeology (Co-operative) Education (ACE)**.”

Page 277, 2018-2019 Calendar, under the heading 8.5 Certificate in Aboriginal and Indigenous Studies, amend the section as follows:

#### **“8.5 Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**

[www.mun.ca/hss/abt](http://www.mun.ca/hss/abt)

[www.mun.ca/hss/about/contact/coordinators.php](http://www.mun.ca/hss/about/contact/coordinators.php)

The Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies is administered by the Department of Archaeology.

The Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies is designed for those interested in learning about the history, cultures, languages, beliefs, and experiences of ~~Aboriginal and~~ Indigenous peoples.

The objective of the program is to provide foundational knowledge for understanding historical and contemporary experiences of ~~Aboriginal and~~ Indigenous peoples - from the origins of first peoples and ~~their~~ complex histories over the proceeding millennia, to present movements and the growing desire for reconciliation between governments and ~~Aboriginal and~~ Indigenous societies.

The area of ~~Aboriginal and~~ Indigenous studies is an increasingly important field in Canada, and the world. This program will benefit a wide variety of learners, including current and prospective university



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students, and individuals interested in a career in the public, not-for profit, and non-governmental sectors.

**8.5.1 Faculty of Humanities and Social Sciences Certificate Regulations**

Students intending to complete a certificate program within the Faculty of Humanities and Social Sciences must meet the Admission requirements as outlined in the University Calendar. Students are also advised to consult the University Calendar regarding **General Regulations for Certificate Programs** and **Graduation Requirements**.

**8.5.2 Advising**

Throughout their program of study, students are encouraged to contact an academic advisor or the Coordinator of the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies for assistance with course planning, declaring their program of study, prerequisite and registration issues, and with questions about the eligibility of any courses not listed here.

A tentative list of upcoming course offerings in the program can be found at [www.mun.ca/hss/courses.php](http://www.mun.ca/hss/courses.php).

**8.5.3 Declaring the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**

Students interested in a Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies are first encouraged to consult with the Program Coordinator to discuss the requirements of the program. After consultation with the Coordinator, students wishing to enroll in the Certificate can declare a Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies by contacting the Office of the Registrar. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at [www.mun.ca/hss/programs/undergraduate/ideclare.php](http://www.mun.ca/hss/programs/undergraduate/ideclare.php).

**8.5.4 Regulations for the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**

As part of the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies students must complete a 3 credit hour foundation course at the 1000-level ~~and 3 credit hours in a capstone course at the 3000-level~~. It is anticipated that the foundation course will be taken at the beginning of the program, ~~and the capstone course will be taken at the~~

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~~completion of the program.~~ As part of their course selections, ~~normally prior to completing the capstone course,~~ students will also complete at least ~~one~~ two course ~~courses~~ that emphasizes the origins and histories of ~~Aboriginal and~~ Indigenous peoples ("past"), and at least ~~one~~ two course ~~courses~~ that emphasizes contemporary issues of ~~Aboriginal and~~ Indigenous peoples ("present").

The Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies consists of 21 credit hours as prescribed below:

1. Archaeology 1005 or History 1005; and
2. ~~45~~ 18 credit hours chosen from **Table 1 Courses for the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**, including a minimum of ~~3~~ 6 credit hours from the "Past" column and a minimum of ~~3~~ 6 credit hours from the "Present" column; ~~and~~
3. ~~Law and Society 3012 or 3014.~~

**Table 1 Courses for the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**

Theory Courses	"Past" Courses	"Present" Courses
Archaeology 1005 or History 1005 <del>Law and Society 3012, 3014</del>	Archaeology 2481, 3290, 3291, 3510, 3588, 3590 Archaeology/History 3520, 3525 History 2800, 3765	Anthropology 2414, 3070, 3240 Archaeology 2482 English 2160 Gender Studies 3015 <u>Law and Society 3012, 3014</u> Linguistics 2060 Political Science 3830

Not all courses are offered every semester. Students are strongly advised to consult with the Program Coordinator for assistance with course planning, and to generally follow **Table 2 Suggested Course Sequencing for the Certificate ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**.

When the opportunity is available for students to take appropriate Language Study courses in the Department of Linguistics, the Program Coordinator may seek written permission from the Faculty's Undergraduate Waivers and Appeals Committee to include up to 6 credit hours in the program. Other Humanities and Social Sciences courses whose Calendar entry clearly establishes an emphasis on ~~Aboriginal and~~ Indigenous Studies, including courses delivered exclusively at Grenfell

Department of Archaeology (cont'd)

Campus or the Labrador Institute, may be eligible. Students should speak with the Program Coordinator for information.

Eligible 4000-level credit hours may be substituted following the process outlined in **General Regulations for Certificate Programs**.

**Table 2 Suggested Course Sequencing for the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies**

First 3 credit hours: Archaeology 1005 or History 1005
Next <del>15</del> <u>18</u> credit hours: Complete an additional <del>five</del> <u>six</u> courses selected from <b>Table 1 Courses for the Certificate in <del>Aboriginal and Indigenous</del> <u>Indigenous- Aboriginal Studies</u></b> , including at least <del>one</del> <u>two</u> "Past" <del>course</del> <u>courses</u> and at least <del>one</del> <u>two</u> "Present" <del>course</del> <u>courses</u> (Certificate total is 7 courses)
<del>Last 3 credit hours: Choose from Law and Society 3012 or Law and Society 3014 (Certificate total is 7 courses)</del>

**8.5.5 Course Prerequisites**

Many approved courses are suitable for students in all disciplines without a background in the discipline. Other approved courses may have prerequisites.

**8.5.6 Regulation Concerning the Former Minor in Aboriginal Studies**

A student who is enrolled in, or who has completed the former Minor in Aboriginal Studies, is not eligible to enroll in the Certificate in ~~Aboriginal and Indigenous~~ Indigenous- Aboriginal Studies.

**8.5.7. Regulation Concerning the Former Certificate in Aboriginal and Indigenous Studies**

A student may not receive both the Certificate in Indigenous-Aboriginal Studies and the former Certificate in Aboriginal and Indigenous Studies."

Page 339, 2018-2019 Calendar, under the heading 15.2 Archaeology, amend the section as follows:

**"1005 Critical Reading and Writing in ~~Aboriginal and Indigenous~~ Indigenous-Aboriginal Studies** (same as History 1005) features the analysis of scholarly literature, media, and other sources of knowledge related to Aboriginal and Indigenous studies. Students practice analytical reading and writing through class discussion and assignments related to the study of both past and present. All sections of this course follow

Department of Archaeology (cont'd)

Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw).

CR: History 1005, the former ARCH 2590, the former History 1016

**Abbreviated Course Title:** CRW Indigenous-Aboriginal”

Page 363, 2018-2019 Calendar, under the heading 15.16 History, amend the section as follows:

**“1005 Critical Reading and Writing in ~~Aboriginal and Indigenous~~ Indigenous-Aboriginal Studies** (same as Archaeology 1005) features the analysis of scholarly literature, media, and other sources of knowledge related to Aboriginal and Indigenous studies. Students practice analytical reading and writing through class discussion and assignments related to the study of both past and present. All sections of this course follow Critical Reading and Writing Course Guidelines available at [www.mun.ca/hss/crw](http://www.mun.ca/hss/crw).

CR: Archaeology 1005, the former HIST 1016

**Abbreviated Course Title:** CRW Indigenous-Aboriginal”

54.6 Department of English

It was moved by Dr. Surprenant, seconded by Dr. George, and carried that the following calendar changes be approved.

Page 303, 2018-2019 Calendar, under the heading 14.6.5 Major in Communication Studies, add the following new section and renumber accordingly:

**“14.6.5.4 Regulations for the Minor in Communication Studies**

1. Students who choose to complete a Minor in Communication Studies must complete at least 24 credit hours in Communication Studies as follows:
  - a. CMST 2000; 2001; 3000; 4000;
  - b. 3 credit hours chosen from: CMST 2813, CMST 3010-3020, CMST 3816, CMST 3913, CMST 4001, CMST 4010-4020, or CMST 4402
  - c. 9 credit hours in additional Communications Studies courses from **Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major in Communication Studies.**
  - d. A minimum of 9 credit hours must come from the 3000 level or above.”

Page 303, 2018-2019 Calendar, under the heading 14.6.5 Major in Communication Studies, amend the section as follows:

Department of English (cont'd)

**“14.6.5 Major and Minor in Communication Studies**

The Major and Minor in Communication Studies are is administered by the Department of English.

The Major and Minor in Communication Studies draws upon a variety of disciplines to provide students with a critical understanding of the role media and communication technologies play in culture and society. Courses focus on the analysis of media and communication technologies, the mass circulation of ideas and information, the relationship between communication and society, and the transformation of mass forms of popular culture. In addition to exploring the historical developments of media and communication, these programs introduces students to emerging theoretical and methodological approaches to the study of contemporary media. Core courses in Communication Studies provide students with knowledge of key traditions in communication studies and cover a series of critical themes that are intended to guide students throughout the program.

Communication Studies course descriptions are found at the end of the Faculty of Humanities and Social Sciences section under **Course Descriptions, English, Communication Studies** and are designated by CMST.”

Page 303, 2018-2019 Calendar, under the heading 14.6.5.2 Declaring the Major in Communication Studies, amend the section as follows:

**“14.6.5.2 Declaring the Major or Minor in Communication Studies**

Students wishing to declare a Major or Minor in Communication Studies shall consult with the program's designated academic advisor to discuss the requirements of the program. Information about declaring a program of study in the Faculty of Humanities and Social Sciences is available at [www.mun.ca/hss/programs/undergraduate/ideclare.php](http://www.mun.ca/hss/programs/undergraduate/ideclare.php).

As per the **Degree Regulations, General and Honours Degrees, The Major Program, Major Programs of Study**, students completing a Major in Communication Studies are ineligible for an interdisciplinary Minor in any program. Credit hours in a course cannot be used to fulfill the requirements of two Major programs, of both a Major and a Minor program, or the program requirements all three of a Major, diploma and certificate.”

Page 304, 2018-2019 Calendar, under the heading 14.6.5.4 Course List, amend the section as follows:

Department of English (cont'd)

**“14.6.5.45 Course List**

Not all courses are necessarily offered each year. Students must be careful not to register for different designations of the same course that is cross-listed with different departments. Normal departmental prerequisites for courses are applicable.

**Table 1 Core Faculty of Humanities and Social Sciences Courses Approved for the Major and Minor in Communication Studies**

<b>1000 and 2000 Level Courses</b>	<b>3000 Level Courses</b>	<b>4000 Level Courses</b>
CMST 2000, 2001 CMST 2813 or English 2813 Linguistics 1100 Philosophy 2140 or the former 2582 Philosophy 2360 or the former 3620 Religious Studies 2812 Sociology 2210	Anthropology 3630 or Sociology 3630 CMST 3000, <u>3001</u> CMST 3010-3020 CMST 3816 or the former English 3816 CMST 3913 or English 3913 English 3843, 3912 Folklore 3612, 3930 Political Science 3350, 3860	CMST 4000, 4001, 4010-4020 CMST 4402 or the former English 4402 Sociology 4107

Page 304, 2018-2019 Calendar, amend the heading 16.6.5.5 Previous Calendar Regulations to read as follows:

**“14.6.5.56 Previous Calendar Regulations”**

54.7 Marine Institute

It was moved by Mr. Blackwood, seconded by Mr. Howse, and carried that the following calendar changes be approved.

Page 150, 2018-2019 Calendar, under the heading 4.1.2 Bachelor of Technology, amend the section as follows:

**“4.1.2 Bachelor of Technology**

The Bachelor of Technology program prepares graduates for career advancement in health science technology or engineering/applied science technology industries. It is designed for students who have graduated from an accredited diploma of technology program that is applicable to one of two ~~optional~~ **major** areas **of study**. Courses in the program provide the student with an introduction to human resource and business management concepts, and the social contexts in which their careers will be based. The program consists of 39 credit hours in addition to work

Marine Institute (cont'd)

completed in a diploma program and can be taken on a full-time or part-time basis.

The optional major areas of study are:

- Major in Engineering and Applied Science Technology Option, which is normally chosen by students who have an engineering/applied science technology diploma.
- Major in Health Sciences Technology Option, which is normally chosen by students who have a health sciences technology diploma.”

Page 150, 2018-2019 Calendar, under the heading 5.3 Admission Requirements for Applicants to the Bachelor of Technology Program, amend the section as follows:

**“5.3 Admission Requirements for Applicants to the Bachelor of Technology Program**

1. The application for admission or readmission is submitted online; current and returning Fisheries and Marine Institute of Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at [www5.mun.ca/admit/twbkwbis.P\\_WWWLogin](http://www5.mun.ca/admit/twbkwbis.P_WWWLogin). Applicants who are new to Fisheries and Marine Institute of Memorial University of Newfoundland should follow the application instructions at [www.mun.ca/undergrad/apply](http://www.mun.ca/undergrad/apply). This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.
2. **Categories for admission to the Bachelor of Technology Program**  
Applicants must meet the regular admission requirements of the University and be eligible for admission in one of the following categories:
  - Category A: applicants holding a diploma of technology, excluding Nautical Science, from the Marine Institute,
  - Category B: applicants holding a diploma of technology accredited by the Canadian Technology Accreditation Board (CTAB) or Technology Accreditation Canada (TAC), or the Canadian Medical Association (CMA),
  - Category C: applicants holding a diploma of technology comparable to a Marine Institute diploma of technology,
  - Category D: applicants holding a Certified Engineering Technologist (CET) designation or a Professional Technologist (PTech) designation along with a diploma of technology acceptable to the Admissions Committee,
  - Category E: applicants who have Canadian Forces training acceptable to the Admissions Committee,

Marine Institute (cont'd)

- Category F: applicants who hold a diploma of technology from an institution with which the Marine Institute has an articulation agreement.
- 3. Upon acceptance into the program, students will be admitted to one of the two ~~majors options~~: the Major in Engineering and Applied Science Technology ~~Option~~ or the Major in Health Sciences Technology ~~Option~~. Students may be permitted to change their ~~option~~ major with the approval of the Marine Institute Committee on Undergraduate Studies.
- 4. Applications to the program will be considered by the appropriate admissions committee(s).
- 5. In accordance with the **UNIVERSITY REGULATIONS - Residence Requirements - Second Degree**, students completing the Bachelor of Technology program, as a second degree, must complete all required courses in their ~~stream~~ major area of study within the Bachelor of Technology program.”

Page 152, 2018-2019 Calendar, under the heading 6.2 Bachelor of Technology, amend the section as follows:

**6.2 Bachelor of Technology**

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in **Table 3 Bachelor of Technology - Major in Engineering and Applied Science Technology Option** and **Table 4 Bachelor of Technology - Major in Health Science Technology Option**. These courses may have prerequisites which have to be met.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Technology a candidate shall successfully complete the program with a minimum overall average of 60% and a minimum numeric grade of 50% in each course required for the degree unless stated otherwise within the course description.

**6.2.1 Bachelor of Technology - Major in Engineering and Applied Science Technology ~~Option~~**

- Students must take 39 credit hours with 24 credit hours from the required courses and 15 credit hours from the electives.
- At least one elective must be chosen from each of the groups A and B.



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**Table 3 Bachelor of Technology - Major in Engineering and Applied  
Science Technology Option**

Required Courses	Group A Electives	Group B Electives
<ul style="list-style-type: none"> <li>• 3 credit hours in English at the 1000 level</li> <li>• MSTM 4010</li> <li>• MSTM 4019</li> <li>• MSTM 4020</li> <li>• MSTM 4025 or Statistics 1510 or 2500 or equivalent</li> <li>• MSTM 4040</li> <li>• MSTM 4060</li> <li>• MSTM 4400</li> </ul>	<ul style="list-style-type: none"> <li>• Business 1101 or 2102</li> <li>• Business 4000</li> <li>• Economics 3360</li> <li>• MSTM 4008</li> <li>• MSTM 4011</li> <li>• MSTM 4012</li> <li>• MSTM 4013</li> <li>• MSTM 4017</li> <li>• MSTM 4050</li> <li>• MSTM 4070</li> <li>• MSTM 4090 or Business 1000</li> </ul>	<ul style="list-style-type: none"> <li>• Economics 1010 or the former 2010</li> <li>• Economics 1020 or the former 2020</li> <li>• Economics 3080</li> <li>• MSTM 4014</li> <li>• MSTM 4015</li> <li>• MSTM 4016</li> <li>• MSTM 4030 or Sociology 2120 or Geography 3015 or Sociology 3015</li> <li>• MSTM 4055</li> <li>• Philosophy 1100</li> <li>• Philosophy 2330 or the former 2571</li> </ul>

**6.2.2 Bachelor of Technology - Major in Health Science  
Technology Option**

- Students must take 39 credit hours with 18 credit hours from the required courses and 21 credit hours from the electives.
- At least one elective must be chosen from each of the groups A, B, and C.

**Table 4 Bachelor of Technology - Major in Health Science Technology  
Option**

Required Courses	Group A Electives	Group B Electives	Group C Electives
<ul style="list-style-type: none"> <li>• 3 credit hours in English at the 1000 level</li> <li>• MSTM 4019</li> <li>• MSTM 4025 or Statistics 1510 or 2500 or equivalent</li> <li>• MSTM 4040</li> <li>• MSTM 4060</li> <li>• MSTM 4400</li> </ul>	<ul style="list-style-type: none"> <li>• Business 1101 or 2102</li> <li>• Business 4000</li> <li>• Economics 3360</li> <li>• MSTM 4008</li> <li>• MSTM 4011</li> <li>• MSTM 4012</li> <li>• MSTM 4013</li> <li>• MSTM 4017</li> <li>• MSTM 4050</li> <li>• MSTM 4090 or Business 1000</li> </ul>	<ul style="list-style-type: none"> <li>• Economics 1010 or the former 2010</li> <li>• Economics 1020 or the former 2020</li> <li>• Economics 3080</li> <li>• MSTM 4014</li> <li>• MSTM 4015</li> <li>• MSTM 4016</li> <li>• MSTM 4030 or Sociology 2120 or Geography 3015 or Sociology 3015</li> <li>• MSTM 4055</li> </ul>	<ul style="list-style-type: none"> <li>• Biology 2040 or 2041</li> <li>• Psychology 1000</li> <li>• Psychology 2010</li> <li>• Psychology 2020</li> <li>• Psychology 2030</li> <li>• Psychology 2800</li> </ul>

		<ul style="list-style-type: none"> <li>•Philosophy 1100</li> <li>•Philosophy 2100 or the former 2551; 2110 or the former 2553; 2120 or the former 2552</li> <li>•Philosophy 2330 or the former 2571</li> </ul>	
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#### 54.8 Department of Biology

It was moved by Dr. Abrahams, seconded by Dr. Bugden, and carried that the following calendar changes be approved.

Page 469, 2018-2019 Calendar, under the heading 11.2 Biology, amend the section as follows:

#### **“11.2 Biology** **[www.mun.ca/biology](http://www.mun.ca/biology)**

The following undergraduate programs are available in the Department:

1. Biochemistry and Cell Biology Joint Honours
2. Biology and Earth Sciences (Geology) Joint Honours
3. Biology and Psychology Joint Honours
4. Biology and Psychology (Behavioural Neuroscience) Joint Honours
5. Biology and Statistics Joint Honours
6. Joint Major in Marine Biology
7. Major or Honours or Major (Co-operative) or Honours (Co-operative) in Biology
8. ~~Major or Honours, or Major (Co-operative) or Honours (Co-operative), in Biology (Cell and Molecular)~~
9. ~~Major or Honours, or Major (Co-operative) or Honours (Co-operative), in Biology (Ecology and Conservation)~~
10. ~~Honours, or Honours (Co-operative), in Biology (Marine)~~
8. Biology Concentrations
9. Minor in Biology

Details of joint programs are given after the Regulations for the Honours Degree of Bachelor of Science.

Biology course descriptions are found at the end of the Faculty of Science section under Course Descriptions, Biology.

For the purposes of a Major, or Honours degree in Biology, Medicine 310A/B count as Biology courses.

## Department of Biology (cont'd)

### **11.2.1 Entrance Requirements**

Entry to the Biology Majors Program is competitive and based on academic standing.

To be considered for admission to the program students must have completed Biology 1001/1002 with an average of at least 65%. In addition, applicants will normally have completed the following courses (or their equivalents) and must have a minimum overall average of 60% in these courses.

1. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
2. Mathematics 1090 and Mathematics 1000 (or Mathematics 109A/B and Mathematics 1000, or Mathematics 1000 only)
3. Chemistry 1050/1051 (or 1200 and 1001) or Physics 1020/1021 (or equivalent)
4. If Mathematics 1000 taken, any one other first year course.

Chemistry 1050/1051 (or 1200 and 1001) should be taken in the first year, as it is a prerequisite for other required courses in the programs, and delaying chemistry until second year may make it difficult to complete the program in the normal eight semesters.

### **11.2.2 Minor in Biology**

A minor in Biology will consist of 24 credit hours in Biology courses: 1001 and 1002 (or equivalent) plus any 18 credit hours chosen from the list of Biology courses except Biology 2040, 2041, 2120, 3053, and 3820. The choice of courses must be made in consultation with the ~~Head of Biology or delegate~~ Academic Program Officer and it is recommended (but not required) that students take at least two Biology courses at the 3000 level or above.

### **11.2.3 General Degrees**

Each Major is assigned an ~~faculty~~ academic advisor who should be consulted on academic problems, including course selection.

#### **11.2.3.1 Major in Biology**

All students majoring in Biology are required to complete a minimum of 45 credit hours in courses from the Department of Biology offering. Those 45 credit hours must include: Biology 1001 and 1002 or their equivalents; the 15 credit hours in core courses listed below; and 24

Department of Biology (cont'd)

credit hours in Biology electives at the 2000, 3000 or 4000 level except Biology 2040, 2041, 2120, 3053, and 3820.

Biology Core (15 credit hours): Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404.

A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.

All majors must also successfully complete the following courses or their equivalents:

1. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
2. Physics 1020 and 1021 (or equivalent)
3. Mathematics 1000
4. Chemistry 1050/1051 (or 1200 and 1001), Chemistry 2400 and 2401
5. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
6. Biochemistry 2201 or the former 2101, and 3106 or 3206
7. Extra Science courses as necessary to fulfil the requirement for 78 credit hours in Science as stipulated in Clause 3.a. of the **Regulations for the General Degree of Bachelor of Science.**

It is recommended, but not required, that a Computer Science course be included and the Department of Biology strongly recommends Computer Science 1000 or 1600.

*Note: To minimize timetabling problems, students on the St. John's campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and 2060 and 2900 in their fourth semester (Winter).*

**11.2.3.2 Major in Biology (Cell and Molecular)**

~~All students majoring in Biology (Cell and Molecular) are required to complete a minimum of 45 credit hours in courses from the Department of Biology offering. Those 45 credit hours must include: Biology 1001 and 1002 or their equivalents; the 15 credit hours in core courses listed below; Biology 3530 and 4241; 6 credit hours from the recommended Biology courses for Biology (Cell and Molecular) listed below; and 12 credit hours from Biology electives at the 2000, 3000 or 4000 level except Biology 2040, 2041, 2120, 3053, and 3820.~~

Department of Biology (cont'd)

~~Biology Core (15 credit hours): Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404.~~

~~Recommended Biology courses for Biology (Cell and Molecular)) are 3050, 3052, 3401, 3402, 3500, 3620, 3950, 3951, 4010, 4040, 4050, 4200, 4245, 4250, 4251, 4255, 4404, 4550, 4605, and 4607.~~

~~A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.~~

~~All majors must also successfully complete the following courses or their equivalents:~~

- ~~1. English 1090 or the former English 1080 and 1110 (or equivalent)~~
- ~~2. Physics 1020 and 1021 (or equivalent)~~
- ~~3. Mathematics 1000~~
- ~~4. Chemistry 1010 and 1011 (or equivalent), Chemistry 2440~~
- ~~5. Statistics 2550~~
- ~~6. Biochemistry 2101 and 3106~~
- ~~7. Extra Science courses as necessary to fulfil the requirement for 78 credit hours in Science as stipulated in Clause 3.a. of the Regulations for the General Degree of Bachelor of Science.~~

~~It is recommended, but not required, that a Computer Science course be included and the Department of Biology strongly recommends Computer Science 1000 or 1600.~~

~~*Note: To minimize timetabling problems, students on the St. John's campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and 2060 and 2900 in their fourth semester (Winter).*~~

**11.2.3.3 Major in Biology (Ecology and Conservation)**

~~All students majoring in Biology (Ecology and Conservation) are required to complete a minimum of 45 credit hours in courses from the Department of Biology offering. Those 45 credit hours must include: Biology 1001 and 1002 or their equivalents; the 15 credit hours in core courses listed below; Biology 4650 and 4651; 6 credit hours from the recommended Biology courses for Biology (Ecology and Conservation) listed below; and 12 credit hours from Biology electives at the 2000, 3000 or 4000 level except Biology 2040, 2041, 2120, 3053, and 3820.~~

~~Biology Core (15 credit hours): Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404.~~

Department of Biology (cont'd)

~~Recommended Biology courses for Biology (Ecology and Conservation) are 3041, 3050, 3295, 3300, 3610, 3620, 3640, 3709, 3710, 3711, 3714, 3715, 3750, 40 40, 4141, 4180, 4182, 4250, 4306, 4307, 4360, 4405, 4505, 4605, 4607, 4620, 4630, 4701, 4710, 4750, and 4820.~~

~~A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.~~

~~All majors must also successfully complete the following courses or their equivalents:~~

- ~~1. English 1090 or the former English 1080 and 1110 (or equivalent)~~
- ~~2. Physics 1020 and 1021 (or equivalent)~~
- ~~3. Mathematics 1000~~
- ~~4. Chemistry 1010 and 1011 (or equivalent), Chemistry 2440~~
- ~~5. Statistics 2550~~
- ~~6. Biochemistry 2101 and 3106~~
- ~~7. Extra Science courses as necessary to fulfil the requirement for 78 credit hours in Science as stipulated in Clause 3.a. of the Regulations for the General Degree of Bachelor of Science.~~

~~It is recommended, but not required, that a Computer Science course be included and the Department of Biology strongly recommends Computer Science 1000 or 1600.~~

*Note:*

*~~To minimize timetabling problems, students on the St. John's campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and 2060 and 2900 in their fourth semester (Winter).~~*

**11.2.3.4 Major in Biology (Marine)**

**Important Notice**

~~The Major in Biology (Marine) is no longer being offered. Students who have already declared this major may complete the program in accordance with UNIVERSITY REGULATIONS, Degree and Departmental Regulations, Year of Degree and Departmental Regulations Faculty of Humanities and Social Sciences and Faculty of Science, or may instead switch to the Joint Major in Marine Biology by completing a Change of Academic Program form.~~

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**11.2.3.52 Major in Biology (Co-operative) Program (BCOP)**

This program is available to full-time Biology majors only.

The Biology (Co-operative) Program (BCOP) provides an opportunity for students to learn valuable practical skills while working in fields related to Biology. Students complete three Work Terms, which consist of full-time, normally paid employment in the field of Biology of at least 12 weeks in duration. The timing of the Work Terms is such that employers stand to gain from the acquired skills of biology majors in training. The objectives of the Work Term component of the BCOP are embodied in the Work Term descriptions found at the end of the Faculty of Science section under Course Descriptions, Biology, Work Term Descriptions.

**1. Admission Requirements**

- a. Admission is limited, competitive, and selective.
- b. The primary criteria used in reaching decisions on applications for admission are motivation and overall academic achievement. Students may be required to participate in an interview as part of the selection process.
- c. A student must first be admitted to the Biology Major.
- d. Application deadline: October 15 for the following Spring semester work term (normally the third semester in year two).
- e. To be eligible for admission, a student must have completed the second year Biology Core, with an overall average of at least 65%, and an overall average of at least 65% in all Biology courses before the start of the first work term. A student must have an overall average of 65% in all other required courses, and must be registered as a full-time student in the semester in which application is made.

**2. Program of Study**

- a. In addition to the requirements below, a student must fulfill all requirements for ~~one of a Major in Biology; Major in Biology (Cell and Molecular); Major in Biology (Ecology and Conservation); Honours in Biology; Honours in Biology (Cell and Molecular); or Honours in Biology (Ecology and Conservation); or Honours in Biology (Marine).~~
- b. Students' status in the program is assessed at the end of each semester. To remain in BCOP, a student must receive a passing grade in all required courses, and must maintain an overall average of at least 65% in all Biology courses and an overall average of at least 65% in all courses, including electives. A student who fails a required course, fails to maintain an overall average of 65% in Biology courses, or fails to maintain an overall average of 65%, will be required to withdraw from BCOP. The student in question may apply for readmission in a

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subsequent year after passing the specified required course(s) previously failed, or re-establishing the required average.

- c. A student is required to complete three work terms, one of which will normally be either in the Fall or Winter semester.

**3. Work Term Placement**

- a. General management of the BCOP is the responsibility of the designated Academic Staff Member in Co-operative Education (ASM-CE). ASM-CE's are responsible for facilitating the engagement of potential employers in the program, organizing competitions for Work Term employment, arranging job interviews and facilities, managing the co-op data base, and developing employment opportunities and monitoring and evaluating students during the work term.
- b. Students are ultimately responsible for securing their work term placements. ASM-CEs provide support for the job search and inform students of potential opportunities.
- c. A student who is admitted to the co-op program gives permission to the University to provide a copy of the applicant's resume, university transcript and work term evaluations to potential employers.
- d. A student who has been accepted to BCOP may independently obtain a work term placement in consultation with the ASM-CE. Such employment positions must satisfy the criteria for work terms, be confirmed in writing by the employer and be approved by the ASM-CE before the first day of the work term according to the University Diary.

**4. Registration and Evaluation of Performance**

- a. In Work Terms I, II, and III, a student must register for Biology 199W, 299W, and 399W respectively.
- b. The Work Term evaluations shall consist of two components:
  - i. On-the-job Student Performance:  
Job performance shall be assessed by Co-operative Education in consultation with the department using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought. Evaluation of the job performance will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.
  - ii. Assignment(s):
    - 1. A student is required to submit one or more assignment(s) to Co-operative Education as outlined in the course syllabus
    - 2. Assignments(s) are evaluated by a faculty member and an ASM-CE.

Evaluation of the work term assignments will result in one of the following classifications: OUTSTANDING, ABOVE EXPECTATIONS, SATISFACTORY, MARGINAL PASS, FAIL.



### Department of Biology (cont'd)

The evaluation of the job performance and the assignment(s) are recorded separately on the transcript. Overall evaluation of the work term will result in one of the following final grades being awarded:

- Pass with Distinction: Indicates OUTSTANDING PERFORMANCE in both the assignment(s) and the job performance.
  - Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the assignment(s) and the job performance.
  - Fail: Indicates FAILING PERFORMANCE in the assignment(s) or the job performance, or both. To remain in BCOP, a student must obtain a final grade of Pass or higher.
- c. If a student fails to achieve the Work Term standards specified above, the student will be required to withdraw from BCOP. Such a student may reapply to the program, at which time the student will be required to repeat the Work Term with satisfactory performance. Only one Work Term may be repeated in the entire program.
- d. A student who withdraws from a Work Term without acceptable cause subsequent to a job placement will be required to withdraw permanently from BCOP.
- e. A student who drops a Work Term without prior approval from both Co-operative Education and the Biology Co-op Liaison, or who fails to honour an agreement to work with an employer, or conducts him/herself in such a manner as to cause the discharge from the job, will be awarded an overall grade of FAIL for the Work Term in question and will be required to withdraw permanently from BCOP.
- f. Permission to drop a Work Term does not constitute a waiver of degree requirements, and a student who has obtained such permission must complete an approved Work Term in lieu of the one dropped.

### **11.2.4 Honours Degrees**

The attention of students wishing to take Honours is called to those sections of the Calendar dealing with Regulations for the Degree of Bachelor of Science (Honours).

Sixty-nine credit hours in courses, including the 6 first year credit hours and the 15 required core credit hours outlined in the regulations for the General Degree, and the Honours Dissertation (Biology 499A/499B), shall be taken from the Department of Biology offering. Students may elect to complete an Honours Program in Biology or in one of the joint Honours Programs listed under the heading "Programs in Biology". Programs of students taking Honours shall be drawn up in consultation with the student's supervisor, and must be approved by the Head of the Department (or his/her delegate) in accordance with **Admission and**

Department of Biology (cont'd)

**Registration**, clause 2. of the **Regulations for the Honours Degree of Bachelor of Science**.

*Note: Some Graduate Courses may be taken in the final year of the Honours Program with the permission of the Head of the Department and the course instructor.*

A dissertation (6 credit hours) is to be presented on some original piece of work undertaken by the candidate, under the guidance of a faculty member of the department, as appointed by the Head of Department. For students electing to take one of the Joint Honours Programs, the dissertation shall be on a topic representative of the selected program. The Department of Biology considers the dissertation to be an important part of the Honours Program.

The dissertation will be based on a 6 credit hours course (Biology 499A/499B). It will involve directed reading relevant to the dissertation topic, preparation of a dissertation outline, supervised research, data synthesis and interpretation, and preparation and defence of the dissertation.

Two typed copies of the dissertation, complete with figures and tables, are to be submitted not less than two weeks before the end of lectures in the semester in which the candidate is registered for Biology 499B. These copies must be submitted to the Head of Department, and must have met the prior approval of the candidate's Honours supervisor.

Before the last day for examinations in the semester, the candidate will be examined orally on the contents of the dissertation. The examining committee shall consist of the Head of the Department, or delegate, the candidate's supervisor, and an examiner appointed by the Head of the Department in consultation with the candidate's supervisor.

**11.2.4.1 Honours in Biology**

An Honours degree in Biology may comprise a broadly based selection of courses according to the student's interests, or it may be more narrowly focussed. An Honours student may focus on any area of Biology where an appropriate supervisor can be found. All Honours students should choose courses in consultation with their supervisors, but it is particularly important that students wishing to focus within the Honours degree should discuss course selection with an Honours supervisor within their area of interest.

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**1. Biology Course Requirements**

Students seeking an honours degree in Biology are required to successfully complete a minimum of 69 credit hours in courses from the Department of Biology offering. Those 69 credit hours must include:

- a. Biology 1001 and 1002 or their equivalents;
- b. 15 credit hours in the following core courses: Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404; and
- c. 42 credit hours from Biology electives at the 2000, 3000 or 4000 level (except Biology 2040, 2041, 2120, 3053, and 3820) and Biology 499A and 499B.
- d. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.

**2. Core Course Requirements**

All honours students must also successfully complete the following courses or their equivalents:

- a. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
- b. Physics 1020 and 1021 (or equivalent)
- c. Mathematics 1000
- d. Chemistry 1050 and 1051(or 1200 and 1001), Chemistry 2400 and 2401
- e. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550
- f. Biochemistry 2201 or the former 2101, and 3106 or 3206
- g. Electives to make up 120 credit hours

To minimize timetabling problems, students on the St. John's Campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and Biology 2060 and 2900 in their fourth semester (Winter).

**~~11.2.4.2 Honours in Cell and Molecular Biology~~**

**~~1. Cell and Molecular Biology Course Requirements~~**

~~Students seeking an honours degree in Cell and Molecular Biology are required to complete a minimum of 69 credit hours in courses from the Department of Biology offering. Those 69 credit hours must include:~~

- ~~a. Biology 1001 and 1002 or their equivalents;~~

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- ~~b. 15 credit hours in the following core courses: Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404;~~
- ~~c. Biology 3530 and Biology 4241;~~
- ~~d. 12 credit hours from the following recommended Biology courses for Cell and Molecular Biology:  
—Biology 3050, 3052, 3401, 3402, 3500, 3620, 3950, 3951, 4010, 4040, 4050, 4200, 4245, 4250, 4251, 4255, 4404, 4550, 4605, 4607; and~~
- ~~e. 24 credit hours in Biology electives at the 2000, 3000 or 4000 level (except Biology 2040, 2041, 2120, 3053, and 3820) and Biology 499A and 499B.~~
- ~~f. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.~~

2. Core Course Requirements

~~All honours students must also successfully complete the following courses or their equivalents:~~

- ~~a. English 1090 or the former English 1080 and 1110 (or equivalent)~~
- ~~b. Physics 1020 and 1021 (or equivalent)~~
- ~~c. Mathematics 1000~~
- ~~d. Chemistry 1010 and 1011 (or equivalent), Chemistry 2440 or Statistics 2550~~
- ~~f. Biochemistry 2101 and 3106~~
- ~~g. Electives to make up 120 credit hours~~

~~To minimize timetabling problems, students on the St. John's Campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and Biology 2060 and 2900 in their fourth semester (Winter).~~

**11.2.4.3 Honours in Ecology and Conservation Biology**

1. Ecology and Conservation Biology Course Requirements

~~Students seeking an honours degree in Ecology and Conservation Biology are required to complete a minimum of 69 credit hours in courses from the Department of Biology offering. Those 69 credit hours must include:~~

- ~~a. Biology 1001 and 1002 or their equivalents;~~
- ~~b. 15 credit hours in the following core courses: Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404;~~
- ~~c. Biology 4650 and 4651;~~
- ~~d. 12 credit hours from the following recommended biology courses for Ecology and Conservation Biology:~~

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- ~~—Biology 3041, 3050, 3295, 3300, 3610, 3620, 3640, 3709, 3710, 3711, 3714, 3715, 3750, 4040, 4141, 4180, 4182, 4250, 4306, 4307, 4360, 4405, 4505, 4605, 4607, 4620, 4630, 4701, 4710, 4750, 4820; and~~
- ~~e. 24 credit hours in Biology electives at the 2000, 3000 or 4000 level (except Biology 2040, 2041, 2120, 3053, and 3820) and Biology 499A and 499B.~~
- ~~f. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.~~

~~2. Core Course Requirements~~

~~All honours students must also successfully complete the following courses or their equivalents:~~

- ~~a. English 1090 or the former English 1080 and 1110 (or equivalent) b. Physics 1020 and 1021 (or equivalent)~~
- ~~e. Mathematics 1000~~
- ~~d. Chemistry 1010 and 1011 (or equivalent), Chemistry 2440 e. Statistics 2550~~
- ~~f. Biochemistry 2101 and 3106~~
- ~~g. Electives to make up 120 credit hours~~

~~To minimize timetabling problems, students on the St. John's Campus are advised to take Biology 2250 and 2600 in their third semester (Fall), and Biology 2060 and 2900 in their fourth semester (Winter).~~

**11.2.4.4 Honours in Marine Biology**

~~1. Marine Biology Course Requirements~~

~~Students seeking an honours degree in Marine Biology are required to complete a minimum of 69 credit hours in courses from the Department of Biology offering. Those 69 credit hours must include:~~

- ~~a. Biology 1001 and 1002 or their equivalents;~~
- ~~b. 15 credit hours in the following core courses: Biology 2060, 2250, 2600, 2900, plus one of Biology 3401, 3402, 4245 or 4404;~~
- ~~c. Biology 3710 and 3711;~~
- ~~d. 12 credit hours from the following recommended biology courses for Marine Biology:~~
  - ~~—Biology 3014, 3050, 3295, 3620, 3640, 3709, 3712, 3714, 3715, 3951, 4122, 4141, 4182, 4360, 4601, 4605, 4607, 4620, 4630, 4710, 4750, 4810, 4912; and~~

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- ~~e. 24 credit hours in Biology electives at the 2000, 3000 or 4000 level (except Biology 2040, 2041, 2120, 3053, and 3820) and Biology 499A and 499B.~~
- ~~f. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar.~~

~~2. Core Course Requirements~~

~~All honours students must also successfully complete the following courses or their equivalents:~~

- ~~a. English 1090 or the former English 1080 and 1110 (or equivalent) b. Physics 1020 and 1021 (or equivalent)~~
- ~~c. Mathematics 1000~~
- ~~d. Chemistry 1010 and 1011 (or equivalent), Chemistry 2440 e. Statistics 2550~~
- ~~f. Biochemistry 2101 and 3106~~
- ~~g. Electives to make up 120 credit hours~~

~~To minimize timetabling problems, students on the St. John's Campus are advised to take Biology 2250 and 2600 in their third semester (Fall); and Biology 2060 and 2900 in their fourth semester (Winter).~~

**11.2.4.52 Honours in Biology (Co-operative)**

**1. Admission Requirements**

**See Major in Biology (Co-operative)**

**2. Program of Study**

1. In addition to the requirements below, a student must fulfill all requirements for ~~either an Honours in Biology, Honours in Biology (Cell and Molecular), Honours in Biology (Ecology and Conservation), or Honours in Biology (Marine) as described under each specific program.~~
2. To remain in BCOP Honours, a student must receive a passing grade in all required courses, and must maintain an average of at least 65% in all Biology courses and an overall average of at least 70% in all courses, including electives.
3. A student is required to complete three work terms, one of which will normally be either in the Fall or Winter semester.

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**11.2.4.6 Biology Concentrations**

While meeting the requirements for a program in Biology, other than a Minor in Biology, students may choose to select courses in one of the following formal concentrations which, if completed, will be noted on the student's transcript.

Particular attention should be paid to necessary prerequisites when scheduling courses. Students should consult with the Academic Program Officer regarding the availability of courses applicable to their chosen concentration.

**11.2.4.6.1. Applied Ecology and Conservation**

Students selecting an Applied Ecology and Conservation concentration are required to complete 18 credit hours from the following courses:

Biology 4122, 4307, 4360, 4405, 4650, 4651, 4710, 4810, 4820, 4911

**11.2.4.6.2. Aquatic Life**

Students selecting an Aquatic Life concentration are required to complete 18 credit hours from the following courses:

Biology 3014, 3050, 3709, 3710, 3711, 3712, 3714, 3715, 4122, 4601, 4710, 4750, 4912

**11.2.4.6.3. Biological Tools and Techniques**

Students selecting a Biological Tools and Techniques concentration are required to complete 18 credit hours from the following courses:

Biology 3050, 3709, 3950, 3951, 4270, 4605, 4606, 4607, 4710, 4770, 4810, 4820, 4360, 4405

**11.2.4.6.4. Biology for Health Professions**

Students selecting a Biology for Health Professions concentration are required to complete 18 credit hours from the following courses:

- a. Biology 3050, 3052, 3500, 3530 4010, 4050, 4200, 4241, 4245, 4404, 4550
- b. Medicine 310A/B

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**11.2.4.6.5. Comparative Biology**

Students selecting a Comparative Biology concentration are required to complete 18 credit hours from the following courses:

Biology 3202, 3300, 3401, 3402, 3640, 3715, 3750, 4122, 4620, 4630, 4701, 4770, 4910

**11.2.4.6.6. Evolutionary Ecology**

Students selecting an Evolutionary Ecology concentration are required to complete 18 credit hours from the following courses:

Biology 3295, 3715, 3811, 3951, 4250, 4270, 4505, 4620, 4630, 4701, 4710, 4800, 4910

**11.2.4.6.7. Molecular, Microbial, and Cell Biology**

Students selecting a Molecular, Microbial and Cell Biology concentration are required to complete 18 credit hours from the following courses:

- a. Biology 3050, 3052, 3401, 3402, 3530, 3950, 3951, 4050, 4241, 4250, 4251, 4404, 4606
- b. Biochemistry 3207

Page 501, 2018-2019 Calendar, under the heading 12.2 Biology, amend the section as follows:

**“12.2 Biology**

According to the nature of particular courses, the specified number of laboratory hours may consist of some combination of laboratory work, seminars or directed independent study relevant to the practical aspects of the subject matter.

Biology courses are designated by BIOL.

**2900 Principles of Evolution and Systematics** is an introduction to the processes and patterns of evolution, and the principles of classification. Natural selection and other microevolutionary processes, variation and adaptation, species and speciation, phylogenetic systematics, reconstruction of phylogeny, macro-evolutionary patterns in the fossil record and their interpretation.

CO: Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550



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CR: the former BIOL 3900

LH: 3

PR: Science 1807; BIOL 1001, 1002, 2250

PR: Statistics 2550 ~~(or equivalent)~~ or any of the courses listed in the credit restrictions of Statistics 2550

**3401 Comparative Animal Physiology** is a comparative study of the basic physiological processes, with special attention paid to those strategies invoked by animals which enable them to adapt to environmental changes.

CO: Biochemistry 3106 or 3206

CR: the former BIOL 4401

LH: 3

PR: Science 1807; BIOL 2060 and 2210

PR: Biochemistry 3106 or 3206

**3402 Principles of Plant Physiology** is a consideration of the principles of plant physiology, including water relations, nutrition, metabolism, growth and development. CO: Biochemistry 3106 or 3206

CR: the former BIOL 4403

LH: 3

PR: Science 1807; BIOL 2010 and 2060

PR: Biochemistry 3106 or 3206

**3610 Boreal Ecology** is a study of the principal features of terrestrial ecosystems, with emphasis on the boreal region. This course may be offered in a usual 13 week semester or as a two-week field course.

CR: Environmental Science 3131

LC: either three hours of lecture and three hours of laboratory per week or a two week field course that embodies equivalent instructional time

LH: either three hours of lecture and three hours of laboratory per week or a two week field course that embodies equivalent instructional time

PR: Science 1807; BIOL 2010, 2250, 2600 and 2900; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550

~~**3620 Aquatic Microbial Ecology** (same as the former Ocean Sciences 3620) is a study of the nature, distribution and activities of microorganisms in the freshwater and marine environments. Field and laboratory work illustrate some of the investigative techniques used in this area of study.~~

~~CR: the former Ocean Sciences 3620, the former BIOL 3603 LH: 3~~

~~PR: Science 1807; BIOL 2600 and 3050; Statistics 2550 or equivalent~~

**3709 Field Course in Marine Principles and Techniques** begins with a two-week field school immediately prior to the beginning of the Fall

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Semester. In the Fall Semester there are follow-up lectures, readings and submission of reports. The course is designed to introduce the principal marine environments, organisms and techniques. It is strongly recommended that this course be taken before either BIOL 3710, 3711 or 4810.

PR: Science 1807; BIOL 2600; Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550 ~~or equivalent~~ and permission of the Head of Department

**3750 Animal Behaviour I** (same as Psychology 3750) is an introduction to the mechanisms, development, function and evolution of behaviour in animals. Topics include the history of ethology and comparative psychology, and behavioural ecology; methods of animal behaviour study, behaviour of animals in relation to physiology, learning, communication, mating systems, and other areas in Biology and Psychology. CR: Psychology 3750

PR: BIOL 1001 and 1002; Statistics 2550 ~~or equivalent~~ or any of the courses listed in the credit restrictions of Statistics 2550

**4200 Immunology** (same as Biochemistry 4105 and Pharmacy 3006) is an introduction to the cells and organs of the innate and adaptive immune systems. The molecular and cellular basis of allergy, autoimmunity, vaccination and cancer immunology will also be discussed.

CR: Biochemistry 4105, Pharmacy 3006, and the former Pharmacy 4105  
PR: Science 1807; BIOL 2060 ~~and BIOL 3050~~

**4360 Community and Ecosystem Ecology** is a study of the basic principles, patterns and processes of ecological communities and ecosystems.

OR: a seminar/discussion group each week

PR: Science 1807; BIOL 2250, 2600 and 2900 and one of BIOL 2010, 2122 or 2210; Statistics 2550 ~~or equivalent~~ or any of the courses listed in the credit restrictions of Statistics 2550

**4405 Landscape Ecology** is an introduction to the theory and principles of landscape pattern and processes, including issues related to scale, networks, landform and vegetation patterns, species distributions, and natural and human-caused aspects of landscape change.

CO: Statistics 2550 ~~or equivalent~~ or any course that is credit restricted with Statistics 2550

LC: ~~either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time~~

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~~LH: either three hours of lecture and three hours of laboratory per week or a two-week intensive course that embodies equivalent instructional time~~

PR: Science 1807; BIOL 2600 and 18 credit hours in Biology; Statistics 2550 ~~or equivalent~~, or any of the courses listed in the credit restrictions of Statistics 2550 or permission from the course instructor

**4550 Principles of Endocrinology** comprises an introduction to basic concepts concerned with how chemical messages are transmitted and received between cells to coordinate body functions. Hormonal control of adaptation, reproduction, metabolism, growth, digestion, and electrolyte homeostasis will be discussed. Although the endocrinology of invertebrates and lower vertebrates will be mentioned as appropriate, the main emphasis will be on mammalian and human endocrinology at the level of the whole organism.

LH: 3

PR: Science 1807; BIOL 3401; Biochemistry 3106 or 3206

**4607 Models in Biology** is a study of the design and analysis of statistical and mathematical models for exploring the biology of cells, genes, species, populations, communities and ecosystems. Qualitative, quantitative and graphical techniques are used to analyze models and to compare theoretical predictions with empirical data. Classic models of systems biology, population growth, species competition, predator- prey interactions, ecosystem nutrient cycling, immunology, evolutionary invasion analysis, and species distribution will be covered.

LH: 3

PR: BIOL 2060, 2600 and 2900; Statistics 2550 ~~or equivalent~~ or any of the courses listed in the credit restrictions of Statistics 2550. It is recommended that students complete BIOL 3295.

**4800 Advanced Palaeontology** (same as Earth Sciences 4800) is a field, lecture, laboratory and seminar course dealing with selected topics in general and applied paleontology. Topics include measuring evolution and extinction, population paleontology, functional morphology, paleoecology, statistical methods for paleontological studies, and applications in petroleum, mining, and environmental studies. This course is taught and administered by the Department of Earth Sciences.

CR: Earth Sciences 4800

LH: 3

PR: Earth Sciences/BIOL 3811, and one of Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550, ~~the former Statistics 2510~~ or Mathematics 2000”

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Page 511, 2018-2019 Calendar, under the heading 12.5 Earth Sciences, amend the section as follows:

**“12.5 Earth Sciences**

**4800 Advanced Paleontology** (same as Biology 4800) is a field, lecture, laboratory and seminar course dealing with selected topics in general and applied paleontology. Topics include measuring evolution and extinction, population paleontology, functional morphology, paleoecology, statistical methods for paleontological studies, and applications in petroleum, mining, and environmental studies.

CR: Biology 4800

LH: 3

PR: EASC 3811, and Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550 ~~or the former Statistics 2510~~ or Mathematics 2000”

Page 519, 2018-2019 Calendar, under the heading 12.9 Ocean Sciences, amend the section as follows:

**“12.9 Ocean Sciences**

**3640 Environmental Physiology of Animals** (same as Ocean Sciences 3640) covers physiological adaptations of animals facilitating their survival in natural environments with emphasis on physiological and biochemical responses of animals to extreme environments. Starting with the fundamental basis of physiological mechanisms, the course explores various aspects and the integration of major physiological processes (metabolism, respiration, osmoregulation) and how these relate to ecological niche.

CR: the former BIOL 3403 or the former BIOL 4455, Ocean Sciences 3640

PR: BIOL 2060; Biochemistry 3106 or 3206

UL: may not be used to fulfill the physiology course requirement for a Biology major, honours or joint honours program.”

Page 461, 2018-2019 Calendar, under the heading 10.2 Joint Honours, add the following new section:

**“10.2.21 Joint Honours in Marine Biology**

The Joint Honours in Marine Biology is jointly administered by the Department of Ocean Sciences and the Department of Biology. To be eligible for admission, students would normally follow the requirements for the Joint Major in Marine Biology. Specifically, students must have

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completed Biology 2060, 2250, 2600, and 2900 and Ocean Sciences 2000 (or Biology 3710), 2001, 2100 and 2300 and obtained in these courses a grade of "B" or better, or an average of 75% or higher. Selection is based on academic performance in the required courses.

Students who wish to be admitted to this programs must submit an "Application for Admission to Honours Program Faculties of Humanities and Social Sciences or Science" to the Department of Biology and the Department of Ocean Sciences.

The following courses will be required:

1. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses;
2. Mathematics 1000;
3. Earth Sciences 1000;
4. Statistics 2550 or any of the courses listed in the credit restrictions of Statistics 2550;
5. Physics 1020 and 1021 (or 1050 and 1051);
6. Chemistry 1050 and 1051 (or Chemistry 1200 and 1001), and Chemistry 2400 and 2401;
7. Biochemistry 2201 or the former 2101;
8. Biology 1001, 1002, 2060, 2122, 2250 (or Biochemistry 2100), 2600, 2900, 3710 (or Ocean Sciences 2000) and 3711;
9. Ocean Sciences 1000, 2000 (or Biology 3710), 2001, 2100, 2300 and 2500;
10. Additional courses to complete a required 69 combined credit hours in Biology and Ocean Sciences with a minimum of 30 credit hours in either subject (except Biology 2040, 2041, 2120, 3053, and 3820). A minimum of 9 credit hours in Biology at the 3000/4000 level and 15 credit hours in Ocean Sciences at the 3000/4000 level is required;
11. Either Biology 499A and 499B or Ocean Sciences 499A and 499B; and
12. A sufficient number of elective courses to bring the degree total to 120 credit hours.

Notes:

1. Courses cross listed between Biology and Ocean Sciences can only count for one subject or the other.
2. A maximum of 9 credit hours can be in Biology courses with no associated laboratory/seminar."

Page 469, 2018-2019 Calendar, under the heading 11.2 Biology, amend the section as follows:

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**“11.2 Biology**

[www.mun.ca/biology](http://www.mun.ca/biology)

The following undergraduate programs are available in the Department:

1. Biochemistry and Cell Biology Joint Honours
2. Biology and Earth Sciences (Geology) Joint Honours
3. Biology and Psychology Joint Honours
4. Biology and Psychology (Behavioural Neuroscience) Joint Honours
5. Biology and Statistics Joint Honours
6. Joint Major or Joint Honours in Marine Biology
7. Major or Honours or Major (Co-operative) or Honours (Co-operative) in Biology
8. Biology Concentrations
9. Minor in Biology”

Page 484, 2018-2019 Calendar, under the heading 11.9 Ocean Sciences, amend the section as follows:

**“11.9 Ocean Sciences**

[www.mun.ca/osc](http://www.mun.ca/osc)

The Department of Ocean Sciences is the newest Department within the Faculty of Science. It was created in 2012, from the transition of the Ocean Sciences Centre, a research unit and facility that was first opened in 1967. The Department's mandate as an interdisciplinary unit is to focus on increasing our understanding of biological and chemical processes within the oceans, and how they relate to aquaculture and other applied marine fields.

The Department offers graduate programs in Marine Biology outlined under School of Graduate Studies.

The Department offers the following undergraduate programs:

1. Minor in Oceanography
2. Minor in Sustainable Aquaculture and Fisheries Ecology
3. Major in Ocean Sciences
4. Major in Ocean Sciences (Environmental Systems)
5. Joint Major or Joint Honours in Marine Biology

Details of ~~the Joint Major in Marine Biology~~ programs ~~can be found under Joint Majors~~ are provided under Joint Program Regulations.”

54.9 Department of Computer Science

It was moved by Dr. Abrahams, seconded by Professor Fisher, and carried that the following calendar changes be approved.

Page 478, 2018-2019 Calendar, under the heading 11.4.6 Minor in Computer Science, amend the section as follows:

**“11.4.6 Minor in Computer Science**

For a Minor in Computer Science, a student must complete at least 24 credit hours in Computer Science courses, including:

1. Computer Science ~~1000~~, 1001, 1002, 1003, 2001.
2. At least 6 credit hours selected from Computer Science ~~1002~~, 2002, 2003, 2004, 2005, 2006, 2007, 2008.
3. Three additional credit hours at the 3000 level or above.
4. Additional courses as necessary, at the 2000 level or above, to fulfill the requirement for 24 credit hours in Computer Science.”

Page 477, 2018-2019 Calendar, under the heading 11.4 Computer Science, add the following new section:

**“11.4.1 Admission to Major Programs**

Admission to the Major programs in the Department of Computer Science is competitive and selective. Students who wish to enter these programs must submit a completed application form to the Department of Computer Science by June 1 for Fall semester registration.

To be eligible for admission to a Bachelor of Science program in Computer Science, students must have normally completed 24 credit hours as listed below:

1. Computer Science 1001, 1002.
2. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
3. Mathematics 1000 and 1001 (or 1090 and 1000)
4. Six credit hours to satisfy the second Science requirement.

Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance, normally cumulative average and performance in recent courses.

To be eligible for admission to a Bachelor of Arts program in Computer Science, students must have normally completed 24 credit hours as listed below:

Department of Computer Science (cont'd)

1. Computer Science 1001, 1002.
2. Six credit hours to satisfy the Critical Reading and Writing (CRW) requirement, including at least 3 credit hours in English courses.
3. Six credit hours to satisfy the Language Study requirement.
4. Mathematics 1000 and 1001 (or 1090 and 1000).

Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance, normally cumulative average and performance in recent courses.

**11.4.2 Admission to Honours Programs**

The Honours programs in the Department of Computer Science are designed for students who would like to concentrate their studies or pursue graduate work. Students who wish to be admitted to these programs must submit an "Application for Admission to Honours Program Faculties of Humanities and Social Sciences or Science" to the Department of Computer Science by June 1 for Fall semester registration. To be eligible for admission, students must have completed all Computer Science core requirements (Computer Science 1001, 1002, 1003, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008) and obtained in these courses a grade of "B" or better, or an average of 75% or higher. Students who fulfill the eligibility requirements compete for a limited number of available spaces. Selection is based on academic performance in the required courses. In special circumstances, students may be admitted to Honours Programs at times other than June.

Note: Students are advised to consult the Bachelor of Arts (Honours) Degree Regulations or Degree Regulations for the Honours Degree of Bachelor of Science, as appropriate."

Page 477, 2018-2019 Calendar, renumber the heading 11.4.1 Major in Computer Science as 11.4.3 Major in Computer Science and renumber the remaining sections accordingly.

55. Postgraduate Medical Education

It was moved by Dr. Steele, seconded by Dr. Watson, and carried that the following calendar changes be approved.

Page 394, 2018-2019 Calendar, amend sections 8.4, 8.5 and 8.7 as follows:



## Postgraduate Medical Education (cont'd)

### **“8.4 Evaluation Assessment**

#### **Important Note Regarding Competency Based Medical Education**

~~Effective July 1, 2017, residency programs at Memorial University of Newfoundland began implementing Competency Based Medical Education. Competence by Design (CBD) is a mandated initiative of the Royal College of Physicians and Surgeons of Canada (RCPSC) that will transition medical education from a traditional time-based model to a hybrid form of competency-based medical education. The Competency-based curriculum for Family Medicine residency programs is called the Triple C Competency-based Curriculum. For more information regarding Competency Based Medical Education and the rollout schedule for residency programs at Memorial University of Newfoundland, visit the Postgraduate Medical Education (PGME) website at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme), the RCPSC website at [www.royalcollege.ca/resite/home-e](http://www.royalcollege.ca/resite/home-e), and the College of Family Physicians of Canada (CFPC) website at [www.cfpc.ca/Home](http://www.cfpc.ca/Home).~~

Each Resident is expected to complete the requirements of the residency program, as outlined by the discipline Residency Program Committee (RPC), for each year/stage of the program, and to meet the prescribed goals and objectives through the completion of rotations/clinical experiences/clinical blocks ~~mandatory rotations~~. A Resident is ~~evaluated~~ assessed throughout each rotation/clinical experience/clinical block. ~~The evaluation of the A Resident's performance and progress is determined conducted by a subcommittee of the RPC, and is based on the review of~~ written assessments and performance-based direct observations. The results of the Resident assessments ~~evaluation~~ indicate the competency level of the Resident for each goal and objective of the rotation/clinical experience/clinical block. The level of responsibility given to a Resident is based on regular assessment ~~evaluation~~ of abilities by faculty.

Assessment methods used in residency programs are discipline-dependent and in accordance with the appropriate accreditation standards. include, but are not limited to, In-Training Evaluation Reports (ITERs), In-Training Assessment Reports (ITARs), daily shift cards, and field notes. ~~The assessment methods used are discipline-dependent and in accordance with the appropriate accreditation standards.~~

### **8.5 Promotion**

To successfully complete a residency program, a Resident, upon assessment evaluation, must be promoted through all the levels/stages of the program. A Resident must also successfully complete the Teaching Effectiveness Program. A Resident who does not meet the criteria for

### Postgraduate Medical Education (cont'd)

promotion will require appropriate modifications to their training, supervision, and assessment.

For Residents enrolled in programs leading to Certification by the College of Family Physicians of Canada (CFPC), detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy-Discipline of Family Medicine, available at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme).

For Residents enrolled in programs leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) – CBD Curriculum, detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy- Competency by Design, available at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme).

For Residents enrolled in programs leading to Certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) – Traditional Curriculum, detailed information regarding promotion, including criteria for remediation, probation and dismissal can be found in the Resident Assessment, Promotion, Dismissal and Appeal Policy, available at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme).

~~The discipline Residency Program Committee (RPC) meets every year to review a Resident's progress report(s). On the basis of this review, the RPC decides which Residents should be promoted to the next year. A Resident's promotion status at the end of a rotation will be in one of the following categories:~~

#### **8.5.1 Clear Promotion**

~~Clear promotion means a Resident can continue training without restrictions.~~

#### **8.5.2 Additional Training or Remediation**

~~A Resident who does not meet the criteria for clear promotion will be required to complete additional training or remediation in the form of a remedial rotation or a remedial program. If a Resident is required to complete a remedial program, the terms and conditions of the program will be outlined in a written contract.~~

#### **8.5.3 Probation**

~~A Resident will be placed on probation, only once, for:~~

- ~~1. failure to meet the requirements of a remedial rotation; or,~~

Postgraduate Medical Education (cont'd)

~~1. failure to meet the requirements of two rotations in one academic year.~~

~~A Resident may be placed on probation if they fail to meet the terms and conditions of a remedial program contract. The length of the probationary period will be determined by the discipline Residency Program Committee (RPC). If a Resident is required to complete probation, the terms and conditions of the probation will be outlined in a probation contract.~~

**8.5.4 Dismissal**

~~1. If, during a subsequent academic year, a Resident meets the criteria for probation a second time, the Resident will be dismissed from the residency program.~~

~~2. Failure of a Resident to meet the terms and conditions of the probation contract may result in dismissal from the residency program. The RPC, with just cause, reserves the right to dismiss a Resident from a residency program at any time. In such cases, the Dean of Medicine, on behalf of the Faculty, recommends the dismissal to the Registrar who will then take appropriate action.~~

**8.7 Appeal**

~~A Resident has the right of appeal in accordance with the following policies: PGME Evaluation, Promotion, Dismissal, and Appeal Policy. Details regarding the appeal process are available at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme).~~

~~Resident Assessment, Promotion, Dismissal and Appeal Policy- Discipline of Family Medicine Resident Assessment, Promotion, Dismissal and Appeal Policy- Competency by Design Resident Assessment, Promotion, Dismissal and Appeal Policy~~

~~Details regarding the appeal process are available at [www.med.mun.ca/pgme](http://www.med.mun.ca/pgme).~~

56. Senate Committee on Course Evaluation's Membership

The Senate Committee on Elections and Committees considered an email dated October 10, 2018, from Sharon Pippy, Secretary, Senate Committee on Course Evaluation, regarding revisions to their Membership. The Senate Committee on Elections and Committees agreed to approve the revisions and is now forwarding to Senate for approval.

Mr. Nault presented the changes to Senate.

Senate Committee on Course Evaluation's Membership (cont'd)

<b>Committee on Course Evaluation</b>	<b>Member Until August 31</b>
Bazan, Carols (Engineering)	2021 *
Burton, Valerie (History)	2021 *
Connor, Jennifer (Medicine)	2021
White, Bonnie (Grenfell Campus)	2021 *
Walsh, Charlene (Marine Institute)	2020
Wetsch, Lyle (Business)	2020
Furey, Mary (Business)	2020
Vacant (Undergraduate Student (MUNSU))	2019 (April 30)
Vacant (Undergraduate Student (MISU))	2019 (April 30)
Vacant (Undergraduate Student (GCSU))	2019 (April 30)
Alkasasbeh, Ahmad (Graduate Student (GSU))	2019 (April 30)
<del>Associate Director, Instructional Development Office, Centre for</del>	
Innovation in Teaching and Learning, or delegate (ex-officio)	
Director, Centre for Institutional Analysis and Planning	

\*New Member

1. Membership

- (a) Six faculty members  
Appointed by Senate on recommendation of the Committee on Elections and Committees.
- (b) Three undergraduate students, one appointed by the Memorial University Students' Union, one by the Marine Institute Students' Union, and one by the Grenfell Campus Student Union.
- (c) One graduate student, appointed by Senate on nomination by the GSU.
- (d) Director, Centre for Institutional Analysis and Planning (CIAP) or delegate, Secretary of the Committee
- (e) ~~Associate Director, of~~ Centre for Innovation in Teaching and Learning, or delegate (ex-officio)

2. Governing Procedures

- (a) The members of the Committee shall elect the Chairperson and Vice-Chairperson in September each year
- (b) The Committee shall meet at least once each semester
- (c) A quorum for the conduct of business shall be five members

3. Duties and Responsibilities

1. The committee shall monitor the administration of the Course Evaluation Questionnaire (CEQ) and related procedures, including the release and publication of results, in accordance with the Senate Policies and Procedures for Student Rating of Courses and Instruction.

Senate Committee on Course Evaluation's Membership (cont'd)

2. The committee shall prepare written guidelines providing information to students on the purposes of the rating procedure and on university policies for distribution and publication of results.
3. The committee may, in cooperation with the Centre for Institutional Analysis and Planning, develop specific operational guidelines and protocols for efficient and consistent completion of the mandated student rating procedures.
4. The committee shall receive reports of alternative methods of evaluation in courses for which the standard CEQ is not required. The Committee may comment to the academic unit concerning the appropriateness of such methods.
5. The committee shall, upon request, approve alternative methods of administration of the CEQ for regular classroom courses, providing that such methods assure student anonymity and other principles in the normal procedures.
6. The committee shall receive and respond to queries and comments from academic units, faculty members and students concerning the CEQ and student rating procedures.
7. The committee shall deal with requests for access to unsummarized data from course evaluations archived by the Centre for Institutional Analysis and Planning.
8. The committee shall provide direction to the Centre for Institutional Analysis and Planning and responsible staff members regarding responses to requests for supplementary questionnaire items or requests for special reports and analysis of data.
9. The committee shall report to Senate in September or October each year on the operation of the Policies and Procedures, including advice on possible revision of the Policies and Procedures and the Core Evaluation Questionnaire.
10. The committee shall respond to queries from Senate, and may provide Senate with such other reports and recommendations as the Committee deems appropriate within its mandate.
11. The committee shall carry out any other duties as described in "Student Ratings of Courses and Instruction, Administrative Policies and Procedures".

Senate Committee on Course Evaluation's Membership (cont'd)

12. The Centre for Institutional Analysis and Planning will maintain a secretariat for the Committee.
13. The committee shall oversee a review of the Course Evaluation form and associated processes at least every ten years. The committee shall review statistical summaries of previous CEQ data from current and previous results; discuss statistical summaries and make recommendations for adjustment; review issues, requests, and inquiries reported since the last major review to determine what elements to include in the review; develop terms of reference for the review; undertake university-wide consultation and, should the committee feel it necessary, for a subcommittee to undertake or support the review process; review results of the consultation process and identify changes necessitated by the review process; prepare a final report for Senate outlining the results of the review process and make recommendations for change(s) should any arise as a result of the review.
14. The committee will recommend policies for evaluation of courses or course sections which may be exempt from using the CEQ.
15. The committee shall maintain close liaison with the Senate Committee on Teaching and Learning.

It was moved by Mr. Nault, seconded by Dr. George, and carried that the changes to the membership be approved.

57. Senate Committee on Undergraduate Studies – Membership and Terms of Reference

The Senate Committee on Elections and Committees considered a memorandum dated November 28, 2018, from Jennifer Porter, Deputy Registrar and Secretary, Senate Committee on Undergraduate Studies, regarding revisions to their Membership and Terms of Reference. The Senate Committee on Elections and Committees agreed to approve the revisions and is now forwarding to Senate for approval.

Mr. Nault presented the changes to Senate.

**Committee on Undergraduate Studies      Member until August 31**

Vacant	2021
Vacant	2021
Shannahan, Kirby (Business Administration)	2021 *
Wells, Darrell (School of Ocean Technology - MI)	2021 *
Mulligan, Martin (Biochemistry)	2021

Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

Rose, Kathryn (Library)	2021
Fridgen, Travis (Chemistry)	2020
Stordy, Mary (Education)	2020
Walsh, Donna (English)	2020 (Senator)
Gallagher, Katherine (Retired)	2019
Marino, Paul (Science)	2019
Godfrey, John (Director of Advocacy (MUNSU) (or designated alternate)	2019 (April 30)
Vacant (Undergraduate Student, (MUNSU))	2019 (April 30)
Howse, Michael (Undergraduate Student (MISU))	2019 (April 30)
Falle, Nicole (Undergraduate Student (GCSU))	2019 (April 30)
Registrar or delegate	
Registrar, Grenfell Campus or delegate	
Registrar, Marine Institute or delegate	
Director, Centre for Innovation in Teaching and Learning or delegate	
University Librarian or delegate	
One Academic Staff Member in Cooperative or Field Education (ASM-CE), (ASM-FE), or (ASM-CFE)	
Chair, Undergraduate Studies Committee, Marine Institute or delegate	
Chairs of Committee on Undergraduate Studies of the Faculty Councils and Schools or delegate	
Provost and Vice-President (Academic) or delegate	

\* New Member

1. Membership
  - (a) Provost and Vice-President (Academic) or delegate
  - (b) Registrar or delegate
  - (c) Registrar, Grenfell Campus or delegate
  - (d) Registrar, Marine Institute or delegate
  - (e) Director, Centre for Innovation in Teaching and Learning or delegate
  - (f) University Librarian or delegate
  - ~~(f) Chair, Academic Studies Committee, Grenfell Campus or delegate~~
  - (g) One Academic Staff Member in Cooperative or Field Education (ASM-CE), (ASM-FE), or (ASM-CFE)
  - (h) Chair, Undergraduate Studies Committee, Marine Institute or delegate
  - (i) Chairs of the Undergraduate Studies Committees of all Schools and Faculties or delegate
  - (j) Four undergraduate students, Director of Advocacy (or designated alternate) and one other undergraduate student appointed by the Memorial University Students' Union, one by

Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

the Marine Institute Student's Union and one by the Grenfell Campus Student Union

- (k) An appropriate number of academic staff members, at least one of whom shall be a Senator

~~2. The chair of the committee shall be a Senator.~~

~~3.2.~~ Terms of Reference

- (a) To propose minimum standards for the acceptance of undergraduate students into the University, their continuance in their programs and their readmission;
- (b) To propose amendments to general University Regulations pertaining to undergraduate studies.
- (c) To examine any proposed amendments to existing University Regulations on Undergraduate Studies and any proposed new regulations on Undergraduate Studies which originate elsewhere in the University before submission to Senate.
- (d) To examine proposals for all new undergraduate programs and all extensions and changes in existing programs before submission to Senate. The Committee will require units submitting such proposals to indicate in writing that sufficient material and non-material resources are available to operate the proposal and the ways, if any, that existing programs may be affected. In the event that the Committee is not satisfied, it may request further information or refer the matter to the Office of the Provost and Vice-President (Academic) or the appropriate Vice-President for further consideration.
- (e) To approve on behalf of Senate, all new undergraduate courses and changes in existing courses. On a regular basis, Senate will be informed of the courses so approved, the courses being listed by Department, course number and title.
- (f) To advise Senate and the Provost and Vice-President (Academic) on all matters pertaining to Undergraduate Studies.
- (g) To present an ~~monthly~~ annual report on Undergraduate Studies to Senate.
- (h) To act on matters delegated to it by Senate, in particular appeals and requests for waivers of regulations in accordance with procedures, policies and regulations approved by Senate.
- (i) The Committee shall confirm that consultation regarding calendar changes has been undertaken with the St. John's Campus, the Grenfell Campus and the Marine Institute.
- (j) Each semester, receive and review a report on grades considered to be anomalous and an explanation for those anomalies from faculties and schools, Grenfell Campus, and the Marine Institute.



Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

- (k) To advise the Provost and Vice-President (Academic) on academic matters pertaining to the preparation of the University timetable.
- (l) To establish *ad hoc* and standing sub-committees and to delegate to these committees functions it deems appropriate.

**Procedures for the Senate Committee on Undergraduate Studies for Considering an Appeal or Considering a Case of Academic Misconduct**

Appeals can come before the Senate Committee on Undergraduate Studies when denied at the academic unit level. Academic misconduct matters can come before the Senate Committee on Undergraduate Studies or, in the case of students attending Grenfell Campus to the Corner Brook sub-committee of the Senate Committee on Undergraduate Studies, either directly (at first instance) or because the allegation cannot be resolved at the unit level. The procedure for each type of consideration by this committee is set out below.

**The Committee**

- 1. None of the members of the Committee considering an appeal or a case of academic misconduct shall be from the academic unit from which the allegation/appeal originates.
- 2. None of the members of the Committee considering an appeal or a case of academic misconduct shall have been involved in any prior decision-making with respect to the matter under appeal or have any conflict of interest, bias or reasonable apprehension of bias.
- 3. If the Chair of the Committee is not participating in the meeting, the Chair shall designate another Committee member to Chair the meeting.

**Procedure on Appeals**

- 4. All appeals shall be heard and considered anonymously unless the student bringing the appeal requests otherwise.
- 5. In the first instance, the Secretary shall provide the student's appeal for reconsideration to the committee whose decision is being appealed. Should the original committee uphold its original decision, the appeal shall be heard by the Senate Committee on Undergraduate Studies. Should that committee offer additional

Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

reasons for its decision, the student shall be given an opportunity to review the additional information and comment before the Senate Committee on Undergraduate Studies hears the appeal.

6. The faculty/school/campus submission to the Senate Committee on Undergraduate Studies shall consist of the letter to the student from the previous committee, together with additional reasons for its decisions, if any are offered.
7. The student's appeal, which includes all required supporting documents, shall be provided to the Committee by the Secretary. Should the Committee require additional information, it shall be sought from the student or, if obtained from another party, the student shall be given an opportunity to review and comment before the Committee considers such information.
8. A copy of the student's transcript shall be provided to the Committee.
9. Once the Committee has all required information it shall consider the appeal.
10. The decision of a majority of the members present throughout the entire process shall constitute the decision of the Committee.
11. The Secretary shall prepare written reasons for the Committee's decision and communicate the reasons to the student, the academic unit and the Registrar's Office.
12. Where the student's appeal has been unsuccessful the Secretary, when providing the student with the decision, shall advise the student of the right to appeal.
13. Any failure by the academic unit to provide, within the time period stated in the request, additional information requested by the Committee for the determination of the appeal may result in the appeal being successful.
14. Any failure by the student to provide, within the time period stated in the request, any additional information requested by the Committee, may result in the appeal being determined without the information or input from the student.

Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

**Procedure on Hearings of Academic Misconduct**

15. The Secretary of the Committee shall provide to the Committee with the meeting agenda all information received from the investigator as well as comments from the accuser, the accused student and other individuals interviewed by the investigator.
16. The investigator shall attend the meeting held to consider the case, to present the report, to answer questions of fact raised by the Committee, and to clarify information contained in the Report. Should the investigator provide additional information not contained in the report, the student shall be given an opportunity to review and comment before the Committee considers such information.
17. The Investigator shall be absent during discussion of the case and the voting process. Findings of guilt or innocence shall be made using the standard of balance of probabilities.
18. Should the Committee require additional information, it shall be sought from the student or, if obtained from another party, the student shall be given an opportunity to review and comment before the Committee considers such information.
19. If the student declines or fails either to provide further information or to comment on additional information obtained by the Committee within the time period stated in the request, the Committee may proceed to consider the matter without the information or comment.
20. If the Accuser fails to provide information required for the determination of a matter, or fails to provide additional information requested by the Committee within the time period stated in the request, the Committee may dismiss the matter or, if it would not be unfair to the student to do so, determine the matter without the information.
21. The Committee shall first determine by a majority vote of members who have been present throughout the consideration of the allegation, whether the accused student is guilty of the offence (or each offence, if more than one).
22. If the accused student is found guilty of the offence (or more than one if there are multiple offences) the Committee shall then determine by a majority vote of members who have been present

Senate Committee on Undergraduate Studies – Membership and Terms of Reference (cont'd)

throughout the consideration of the allegation, the appropriate penalty in accordance with Penalties in the Case of Resolution by the Senate Committee on Undergraduate Studies.

23. Where the accused student is found guilty of more than one offence, the Committee should consider an appropriate penalty for each offence or, if appropriate, a penalty for the set of offences.
24. The Secretary shall prepare written reasons for the Committee's decision on the allegations and for its decision on the penalty where there has been a finding of guilt and deliver the reasons to the student, the academic unit and the Registrar's Office.
25. Where a finding of guilt has been made against a student the Secretary, when providing the student with the decision, shall advise the student of the right to appeal.

**Documents**

- ~~26. All documents received by Committee members for either hearings or appeals shall be delivered to the Secretary following the delivery of the Committee's decision.~~

It was moved by Mr. Nault, seconded by Dr. George, and carried that the changes to the membership and terms of reference be approved.

58. University Planning and Budget Committee – Membership

The Senate Committee on Elections and Committees considered an email dated January 18, 2019, from Keith Matthews, Interim Director, Centre for Institutional Analysis and Planning, regarding revisions to their Membership. The Senate Committee on Elections and Committees agreed to approve the revisions and is now forwarding to Senate for approval.

Mr. Nault presented the changes to Senate.

**University Planning and Budget Committee Member until August 31**

Anderson, Kirk (Education)	2021 *
Bazan, Carlos (Engineering)	2021 *
Haghiri, Morteza (Grenfell Campus)	2020 (Senator)
Woods, Mike (Medicine)	2020 (Senator)
Brett, Paul (MI)	2020 (Senator)

University Planning and Budget Committee – Membership (cont'd)

Kendall, Ed (Radiology)	2020
Branigan, Phil (Linguistics)	2019
Fiech, Adrian (Computer Science)	2019
Fisher, Andrew (Engineering)	2019 (Senator)
Vice-President (Academic), Chair	
Associate Vice-President (Academic)	
Porter, Jennifer (Office of the Registrar)	
Vacant (Undergraduate Student (MUNSU))	2019 (April 30)
Penney, Kristine (Undergraduate Student (MISU))	2019 (April 30)
Falle, Nicole (Undergraduate Student (GCSU))	2019 (April 30)
Miah, Mohammad Islam (Graduate Student (GSU))	2019 (April 30)
Director of <del>Financial and Administrative Services</del> Budgets	
Director of Centre for Institutional Analysis and Planning	

\* New Member

1. Membership:

- (a) Provost and Vice-President (Academic), Chair ex-officio
- (b) Associate Vice-President (Academic) ex-officio
- (c) Nine members of the academic staff:
  - (i) To be appointed by Senate on the recommendation of the Committee on Committees, giving due weight to considerations of diversity and individual qualities of nominees.
  - (ii) At least five faculty members (Including Marine Institute instructors) who are not administrative heads of academic units.
  - (iii) Not more than one from each academic unit (i.e. non-departmentalized faculties, schools, or departments within departmentalized faculties.)
  - (iv) To be appointed to staggered 3-year terms.
  - (v) Three to be Senators.
- ~~(d)~~ One support staff member (nominated by the President)
- ~~(e)~~ Three undergraduate students, one nominated by the Memorial University of Newfoundland Students' Union, one by the Marine Institute Students' Union, and one by the Grenfell Campus Student Union.
- ~~(f)~~ One graduate student (nominated by the Executive Council of GSU)
- ~~(g)~~ The following ~~two~~three officials shall serve on the committee in a resource and non-voting capacity:
  - (i) Director of Centre for Institutional Analysis and Planning
  - (ii) Director of ~~Financial and Administrative Services~~Budgets

University Planning and Budget Committee – Membership (cont'd)

(iii) One support staff member (to be selected by the committee)

(gh) The Vice-Chair of the Committee to be a senator elected by the committee members.

2. Quorum

(a) For the transaction of business, the full Committee shall require the presence of at least  $33\frac{1}{3}\%$  + 1 of the membership, excluding those serving in a resource capacity.

3. Terms of Reference - The activities of the committee will include the following four areas:

1. Planning. The committee will:

- a. advise the Senate on development of all university frameworks, plans and related documents, making recommendations for their approval by the Senate and the Board.
- b. monitor the progress of established plans, frameworks and related documents. The committee will seek regular updates from the custodians of these documents and provide an annual update to Senate on progress towards goals.
- c. review and advise Senate regarding initiatives established to enhance institutional effectiveness and promote more efficient use of resources.

2. Budget. The committee will:

- a. advise senior administrators on matters related to budget issues, including the university's budget submission to government on behalf of Senate as required
- b. advise Senate and senior administration about the priorities and allocation strategies for the funding provided to the university from government and other sources
- c. advise Senate regarding major new initiatives that have significant implications for resources, including personnel, space and capital expenditures. The Committee shall assess these initiatives in light of the university frameworks and plans, institutional priorities, and the university budget.

3. Research Centres and Institutes. The committee will:

- a. oversee the policy and procedures associated with the establishment of research centres and Institutes at Memorial
- b. review proposals to establish research centres and institutes, and make recommendations for approval to senate.

University Planning and Budget Committee – Membership (cont'd)

4. Special Meetings of Senate. The committee will recommend to Senate topics of strategic interest for special meetings to be held in the fall and spring of each year.
4. Reporting – In addition to monthly reports, the PBC will submit an annual report of its activities to Senate.

It was moved by Mr. Nault, seconded by Professor Fisher, and carried that the changes to the membership be approved.

59. Academic Unit Planning Committee – Membership and Terms of Reference

The Senate Committee on Elections and Committees considered an email dated January 18, 2019, from Keith Matthews, Interim Director, Centre for Institutional Analysis and Planning, regarding revisions to their Membership and Terms of Reference. The Senate Committee on Elections and Committees agreed to approve the revisions and is now forwarding to Senate for approval.

Mr. Nault presented the changes to Senate.

**Academic Unit Planning Committee                      Member until August 31**

Vacant	2021
Victor Maddalena (Medicine)	2021 *
Sudhir Abhyankar (Grenfell Campus)	2020
Ann Dorward (Medicine)	2020
Ed Kendall (Radiology)	2020 (Senator)
Beverly Fleet (Marine Institute)	2019
Vacant (Undergraduate Student (MUNSU))	2019 (April 30)
Rebecca Davis (Undergraduate Student (MISU))	2019 (April 30)
Falle, Nicole (Undergraduate Student (GCSU))	2019 (April 30)
Ahmad Alkasasbeh (Graduate Student (GSU))	2019 (April 30)
Director, Centre for Institutional Analysis and Planning (CIAP) or delegate	

\* New Member

1. Membership
  - (a) Six faculty members, including at least one representative from each of the St. John's, Grenfell and Marine Institute campuses. At least one member must also sit as a member of Senate.
  - (b) Three undergraduate students, one appointed by the Memorial University Students' Union, one by the Marine Institute Students' Union, and one by the Grenfell Campus Student

Academic Unit Planning Committee – Membership and Terms of Reference (cont'd)

- Union.
- (c) One graduate student to be appointed by the Graduate Students' Union.
  - (d) Director, Centre for Institutional Analysis and Planning (CIAP) or delegate, Secretary of the Committee. ~~(Non-voting)~~
2. Governing Procedures
- (a) The members of the Committee shall elect a Chairperson and Vice Chairperson in September each year from the faculty members appointed to the Committee.
  - (b) The Committee shall meet at least once each semester but will normally meet monthly from September to June.
  - (c) A quorum for the conduct of business shall be five members with at least three faculty members in attendance.
  - (d) CIAP will maintain a secretariat for the Committee, arranging meetings, and serving as a repository for all completed Academic Unit Planning material.
3. Scope
- (a) Academic Unit Planning will apply to all academic units on all campuses of Memorial University.
4. Terms of Reference
- (a) The Committee shall monitor the administration of the academic unit planning (AUP) process and related procedures, in accordance with the Senate Policies and the Procedures for the Review of Academic Units, with a modified process for professional units and programs with accreditation processes.
  - (b) The Committee will receive all completed reviews and any follow-up reports or updates and acknowledge receipt of same. The Committee will provide feedback to the Provost and Vice-President (Academic) or designate as to whether or not the review has been conducted in accordance with procedures, and if there are issues in the review that should be addressed. A copy of the Committee's feedback will be provided to the academic unit.
  - (c) The Committee shall oversee and approve the schedule of reviews as developed by the Centre for Institutional Analysis and Planning (CIAP) in consultation with the academic deans or appropriate designates.
  - (d) The Committee shall provide direction regarding issues that may arise that are not addressed in the formal procedures.
  - (e) The Committee shall report to Senate regularly each year on the operation of the Policies and Procedures, including advice on their possible revision.



Academic Unit Planning Committee – Membership and Terms of Reference (cont'd)

- (f) The Committee shall oversee a review of the Academic Unit Planning process and associated processes at least every ten years. The Committee shall develop terms of reference for the review; undertake university-wide consultation and, should the Committee feel it necessary, for a subcommittee to undertake or support the review process; review results of the consultation process and identify changes necessitated by the review process; prepare a final report for Senate outlining the results of the review process and make recommendations for change(s) should any arise as a result of the review.

It was moved by Mr. Nault, seconded by Dr. George, and carried that the changes to the membership and terms of reference be approved.

60. Policy on Revocation of an Honorary Degree

Mr. Nault, Secretary, Committee on Honorary Degrees and Ceremonial, noted that Memorial University does not have any procedure in place to revoke an Honorary Degree. The Committee on Honorary Degrees and Ceremonial prepared procedures for revocation of an honorary degree and these procedures have Legal Counsel's approval.

**Statement on revocation of an honorary degree**

The Senate Committee on Honorary Degrees and Ceremonial may make a recommendation to Senate to revoke an Honorary Degree. In making such a recommendation the Committee shall consider as grounds for revocation any action or conduct which undermines the credibility or integrity of the Honorary Degree, or detracts from Memorial University's original grounds for conferring the degree. The recommendation will be considered at an in-camera meeting of Senate and a decision to revoke will require an affirmative vote of at least two thirds of all members present.

**Procedure for revocation of an honorary degree**

- 1) A written request, with supporting reasons, to consider the revocation of an honorary degree may be made by any person to the Secretary of Senate. The Secretary of Senate shall acknowledge all requests received. The Secretary of Senate may initiate a request for consideration of revocation on their own accord.
- 2) The Secretary of Senate will bring any request to consider the revocation of an honorary degree to the Senate Committee on Honorary Degrees and Ceremonial.

Policy on Revocation of an Honorary Degree (cont'd)

- 3) The Senate Committee on Honorary Degrees and Ceremonial will consider any such request received, and if, in its opinion, there are insufficient grounds to proceed further, the Secretary of Senate will send a reply to that effect to the person who submitted the request.
- 4) If the Senate Committee on Honorary Degrees and Ceremonial determines there may be reasonable grounds for the revocation of an honorary degree, the request will be subject to the rest of this procedure.
- 5) The Secretary of Senate, on behalf of the Committee on Honorary Degrees and Ceremonial, will send, by registered letter (or equivalent), a written notice advising the person, on the basis of the allegations set out in the notice, that revocation of their honorary degree is under consideration. Within the time prescribed in the notice, the person may:
  - a. make representations respecting the matter under consideration or any allegation of fact set out in the notice, or
  - b. voluntarily return their degree parchment, and relinquish all rights and privileges associated with their honorary degree.Further, the notice will indicate that the revocation process will continue, even if the person omits to reply within the prescribed time.
- 6) If the person elects to voluntarily return their honorary degree, they will notify the Secretary of Senate in writing of that fact within the time prescribed in the notice. After the Senate Committee on Honorary Degrees and Ceremonial accepts the voluntarily returned honorary degree, the person's name will be struck from Memorial's record of honorary graduates, and the person must return the honorary degree parchment to the Secretary of Senate. The Secretary of Senate shall notify the Chair of the Senate Committee on Honorary Degrees and Ceremonial that the honorary degree parchment has been voluntarily returned.
- 7) If the person elects to make representations respecting the matter under consideration or any allegation of fact set out in the notice, the person or his or her representative may, within the time prescribed in the notice or as otherwise authorized by the Secretary of Senate, make representations in writing.
- 8) If, within the time prescribed in the notice or authorized by the Secretary of Senate, the person fails to respond to the notice, the Secretary of Senate will request that the Senate Committee on Honorary Degrees and Ceremonial act in accordance with this procedure.
- 9) If the person has made representations, the Secretary of Senate will send all relevant documentation to the Senate Committee on Honorary Degrees and Ceremonial for its consideration.

Policy on Revocation of an Honorary Degree (cont'd)

After due consideration, the Senate Committee on Honorary Degrees and Ceremonial will vote on if the honorary degree should be revoked.

- a. If a simple majority of the members present and voting of the Senate Committee on Honorary Degrees and Ceremonial supports revoking the person's honorary degree, the Committee shall prepare for the Senate a report that contains its recommendation and reasons to revoke the honorary degree.
  - b. If a simple majority of the members present and voting of the Senate Committee on Honorary Degrees and Ceremonial does not support revoking the honorary degree, the person shall be notified, and the request to revoke the honorary degree shall be considered closed.
- 10) If the recommendation to revoke the person's honorary degree is made to Senate, the Senate shall consider the recommendation in an in-camera session, and require 2/3's (two-third's) majority vote of the senators present and voting to revoke the degree.
- a. If Senate votes in favour of revoking the honorary degree, the person shall be informed of the decision and be instructed to return their honorary degree parchment. The person's name shall be struck from Memorial's records and the person shall lose all rights and privileges associated with their honorary degree.
  - b. If Senate does not vote in favour of revoking the honorary degree, the person shall be informed of the decision, and the request to revoke their honorary degree shall be considered closed.
- 11) After a request to revoke an honorary degree has been considered by the Senate Committee on Honorary Degrees and Ceremonial and/or the Senate and has been closed, a subsequent request to revoke an honorary degree for that person shall be dismissed unless substantial new evidence is presented that was not available at the time the initial request was considered.
- 12) In instances where an honorary degree has been revoked, the affected person would not be eligible to be nominated for another honorary degree.
- 13) Normally, requests for revocation of an honorary degree from a deceased person will not be considered

It was moved by Mr. Nault, seconded by Mr. Howse, and carried that these procedures be approved.

61. Pilot on Online Voting for 2019 Senate Elections

Mr. Nault, Chair, Committee on Elections and Committees, noted that the Committee on Elections and Committees met on January 18<sup>th</sup> and approved a pilot of online voting for 2019 Senate elections as proposed by the Chair of the Committee on Elections and Committees using the institutional survey tool, on the condition that individual votes remain anonymous and that Senate give its approval for the pilot. If this pilot is approved, Senate would be specifically allowing the election to proceed while not meeting the requirements set out in sections C 4 (h) and C 4 (l), and any other relevant sections, of the Senate Bylaws.

The move to online voting for Senate elections will address four issues currently being faced by Senate elections:

- The current process is very labour intensive in that the correct number of ballots and envelopes need to be manually counted for each election and distributed by the Senate Office to the Faculties and Schools. Once received by the Faculties and School, the ballots need to be circulated to the eligible electors
- Though it is highly unlikely there would be attempts to cheat in a Senate election, the possibility does exist based on the method of ballot distribution. The ballots are not kept secure once they leave the Senate Office, and the Faculties and Schools may have different methods of distribution to eligible electors which could allow an ineligible elector to vote or an eligible elector to vote more than once
- The current process is expensive and not environmentally friendly as the Senate Office is required to print ballots and two envelopes for each eligible elector. One of the envelopes is used to mail the ballot back to the Senate Office, and the other envelope is for the ballot which is inserted in the mail back envelope. Further, the Senate Office runs at an annual deficit, and efforts are being made to bring the budget back to balance and not rely on the Registrar's Office to cover cost over runs.
- The current process relies on both the internal and external mail services to get the ballots to the eligible electors via their Faculty or School, and to get the completed ballots back to the Senate Office. Each election, several ballots are received late and not counted in the election. This challenge is particularly acute for the Grenfell Campus as it takes longer to get ballots to Corner Brook and for the completed ballots to be returned to St John's.

Procedures for election during the proposed pilot:

- Eligible electors will receive an email inviting them to participate in the election for their constituency based on the information

Pilot on Online Voting for 2019 Senate Elections

submitted to the Senate Office by their respective Faculty or School

- The email eligible electors receive will contain a unique link enabling the elector to vote only once
- Eligible electors will receive a reminder email if they have not voted within seven days and another reminder one day before the election is set to close
- As a precaution, a memo will be sent to all eligible electors via their Faculty or School informing them of the change in election procedures, and asking them to contact the Senate Office if they do not receive the election email containing their unique link to vote
- The Secretary of Senate will review and address any concerns raised by electors during the election, and will involve the Committee on Elections and Committees as needed
- The Committee on Elections and Committees will meet to review the results of the election and certify the winner of the election.

The success of the pilot will be determined by comparing voter turnout in the electronic election compared to the paper ballot method. Further, any reports of voting anomalies experienced by eligible electors and other feedback from electors will be considered by the Committee on Elections and Committees. If the pilot is considered successful by the Committee on Elections and Committee, then changes would be proposed to the Senate Bylaws to allow for electronic voting to either be the only option for conducting Senate elections or one of the approved ways to conduct a Senate election. Any proposed bylaw changes would need to be approved by Senate.

It was moved by Mr. Nault, seconded by Dr. George, and carried to approve a pilot of online voting for 2019 Senate elections. It was suggested that it would be useful to submit a report to Senate after giving the results of the online voting.

62. Chair's Remarks

Dr. Golfman commented on the following:

- Reappointment of Iris Petten, Chair of the Board of Regents
- Collective Bargaining almost completed
- Budget discussions
- Hoping for no snow days as tight class schedule
- New terms of reference ready for Post-Secondary Education Review Board – update in the coming weeks

63. ADJOURNMENT

It was moved by Dr. Gaudine that the meeting be adjourned.

The meeting adjourned at 4:50 p.m.

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CHAIR

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SECRETARY