

University Governance Secretariat St. John's, NL, Canada A1C 5S7 Tel: (709) 864-2176 www.mun.ca/senate www.mun.ca

March 21, 2023

TO: The Chair and Members of Senate

FROM: Michelle H. Snow, Interim Secretary of Senate

SUBJECT: Notice of Meeting and Agenda

There will be a meeting of Senate on **Tuesday**, **April 11**, **2023 at 4:00 p.m.**, **NST** via WebEx.

DRAFT AGENDA

We acknowledge that the lands on which Memorial University's campuses are situated are in the traditional territories of diverse Indigenous groups, and we acknowledge with respect the diverse histories and cultures of the Beothuk, Mi'kmag, Innu and Inuit of this province.

- 1. Approval of the Agenda
- 2. Minutes of the regular meeting of Senate held on March 14, 2023.

Consent Agenda

- 3. Report of the Senate Committee on Undergraduate Studies
 - A. Psychology
 - 1. Amendments to program regulations 11.11.2; 11.11.4 and 11.11.6
 - 2. Amendments to program regulation 10.2.10
 - 3. Amendment to course- Psychology 4910
 - 4. Amendment to course- Psychology 3810
- Report of the Academic Council of the School of Graduate Studies
 - A. School of Fisheries and the School of Ocean Technology
 - Calendar revisions- Master of Marine Studies

Regular Agenda

- Report of the Teaching and Learning Committee 5.
 - Categories of Experiential Learning A.
- Report of the Honorary Degrees and Ceremonial 6.
- 7. Report of the Ad hoc Senate Governance Review Committee
- 8. Remarks from the Chair of Senate-Questions/Comments from Senators
- 9. Other Business

Michelle H. Snow Interim Secretary of Senate

MHS/rh Attachment



Senate Summary Page for Programs

PROGRAM TITLE

11.11. PSYCHOLOGY:

- 11.11. 2. Admission to Major Programs
- 11.11. 4. Requirements for a Major in Psychology
- 11.11. 6. Requirements for a Major in Behavioural Neuroscience (B.Sc. Only)

RATIONALE

These proposed changes are contingent on the Senate approval of the Statistics 1500 course proposed by the Department of Mathematics and Statistics for the 2023-24 Calendar year.

Firstly, the Psychology Department strongly endorses both the proposed Statistics 1500 course. We feel that Statistics 1500 would prepare our future majors in Psychology and Behavioural Neuroscience well for the statistics and research design courses that they are required to complete in the program - specifically, Psychology 2910, 2911, and 3900 (Honours students only).

Given that the requirements for entrance into Statistics 1500 are similar to those for Math 1000 (or equivalent), we propose to amend the current admission regulations, as well as the requirements for the major in Psychology and the major in Behavioural Neuroscience to include this course as an alternative to Math 1000 (or equivalent).

Some students will require Math 1000 (or equivalent) as a pre-requisite for other courses that they plan to take- particularly in the case of our students who plan to complete various Joint Honours programs. We will continue to advise students to take Math 1000 in such cases, and encourage them to also consider taking Stat 1500 as an elective. A note has been added to 11.11.2. to reflect this.

The wording "(or equivalent)" has been added to the mentions of Mathematics 1000 throughout the regulations, as our students have been able to meet the degree requirements in 11.11.4 and 11.11.6. by completing the two Mathematics courses that are alternatives to Mathematics 1000 (or equivalent) that are required for admission (as specified in regulation 11.11.2). We also have specified these courses, as the specific wording did not appear in 11.11.4. or 11.11.6. It is now added for clarity.

Finally, during consultations last year regarding Psychology program changes, Dr. Robert Bailey at Grenfell campus offered some suggestions regarding the courses that might be listed and excluded in 11.11.7. Requirements for a Major in Behavioural Neuroscience, clause 3 – "Eighteen credit hours from the following courses chosen from at least two different sciences". These are to reflect changes in pre-requisites for 3000 level Mathematics courses (recommendation to remove the listing of two 3000-level courses that would be challenging for non-Math majors, and add two pre-requisite 2000-level Mathematics courses that students would need for some courses at the 3000-level and beyond). In addition, he recommended adding Grenfell's recent course Physics 2150 as an exclusion to the list of courses that can be taken in Physics, as it is a general-interest course, similar to another already-excluded course, Physics 2151. These changes have been added to 11.11.7. 3 (f) and 11.11.7. 3. (h).

CALENDAR CHANGES

11.11.2 Admission to Major Programs

Admission to the Major programs in the Department of Psychology is competitive and selective. Students who wish to enter these programs must submit a completed application form, available on the Department of Psychology website in the Winter semester, to the Department of Psychology by June 1 for Fall semester registration. To be eligible for admission, students must have completed the 24 credit hours as listed below with an average of at least 65% in Psychology 1000/1001 and an overall average of at least 60% in Psychology, Critical Reading and Writing (CRW), and Mathematics or Statistics:

- 1. Psychology 1000, 1001.
- 2. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
- 3. Mathematics 1000 (or equivalent) or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent).
- 4. Six credit hours of electives (9 if only Mathematics 1000 or Statistics 1500 is successfully completed).

Students who fulfil 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.

Note: Students should consult the Calendar course descriptions to determine whether Mathematics 1000 (or equivalent) is a pre-requisite for other (non-Psychology) courses they plan to take. In particular, students considering Joint Majors or Joint Honours

programs should consider taking both Mathematics 1000 (or equivalent) and Statistics 1500.

11.11.4 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 <u>Degree Regulations</u> for the General Degree of Bachelor of Arts, as appropriate. All Majors are required to complete a minimum of 42 credit hours of Psychology as listed below:
 - a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930.
 - b. Twelve credit hours in Psychology chosen from the following: 3050, 3100, the former PSYC 3250, 3251, 3350, 3450, 3620, 3650, 3750, or one of 3800, 3810, 3820, 3830, 3840 or 3860.
 - c. Twelve credit hours of 4000-level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
- 2. Psychology Majors following the B.Sc. program are also required to successfully complete the following:
 - a. Mathematics 1000 (or equivalent) <u>or Statistics 1500</u>, <u>or two of Mathematics 1090</u>, 1050, 1051 (or equivalent).
 - b. Biology 1001 and 1002.
 - c. Either Chemistry 1050 and 1051 (or 1200 and 1001 or 1010 and the former 1011); or Physics 1020 (or 1050) and 1021 (or 1051).

Note:

First year students should think carefully about whether Chemistry or Physics best suits their future program needs. Students should examine the prerequisites for upper-level science courses and attempt to take them in their first year.

d. Six credit hours of laboratory courses at the 2000 level or above in one of Biochemistry, Biology, Chemistry, Computer Science, Ocean Sciences or Physics. Students are advised to consult the <u>Course Descriptions</u> section of the Calendar for their chosen lab courses to ensure pre-requisites are met.

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.

3. Psychology Majors following the B.A. program are also required to successfully complete Mathematics 1000 (or equivalent), or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent), and are encouraged to complete at least 6 credit hours in Biology.

11.11.7 Requirements for Honours in Behavioural Neuroscience (B.Sc. Only)

Students completing this program cannot receive credit for Psychology 2920.

A program is offered in the Psychology Department to provide an education in Behavioural Neuroscience. Students planning to enroll in the program are advised to consult with the Head of the Department at the earliest opportunity because certain course choices may restrict later options. Students who intend to pursue graduate studies should take courses leading to the Honours degree.

As a component of the **Degree Regulations** for the General Degree of Bachelor of Science, the program for a Major in Behavioural Neuroscience shall include:

1.

- a. Psychology 1000, 1001, 2521, 2910, 2911, 2930, 3800, 3820, and one of 3810, 3830, 3840, or 3860.
- b. Three credit hours in Psychology chosen from the following: 3050, 3100, the former 3250, 3251, 3350, 3450, 3620, 3650, 3750.
- c. Any research experience course and one of Psychology 4250, 4251, 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.

2.

- a. Mathematics 1000 (or equivalent), <u>or Statistics 1500</u>, <u>or two of Mathematics 1090</u>, 1050, 1051 (or equivalent).
- b. Chemistry 1050 and 1051 (or 1200 and 1001).
- c. Physics 1020 (or 1050) and 1021 (or 1051).
- d. Biology 1001 and 1002.
- e. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
- 3. Eighteen credit hours from the following courses chosen from at least two different sciences:
 - a. Biochemistry: Any 2000-, 3000-, or 4000-level course except the former 2000, 2005, the former 2010, the former 2011, 3202, 3402, or 4502.
 - b. Biology: Any 2000-, 3000-, or 4000-level course except 2040, 2041, 2120, 3053, or 3820.

- c. Chemistry: 2100, 2210, 2301 (or the former Chemistry 2300), 2302, 2400, 2401, 2610, or any 3000 or 4000 level course.
- d. Computer Science: Any 2000, 3000, or 4000 level course except the former 2650 and the former 2801.
- e. Ocean Sciences: any 2000-, 3000-, or 4000-level course.
- f. Mathematics: 2000, 2050, 2051, 2260, 2320, 3000, 3001 or any 3000 or 4000 level mathematics course.
- g. Medicine 310A/B.
- h. Physics: Any 2000, 3000, or 4000 level course except <u>2150</u>, 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.

CALENDAR ENTRY AFTER CHANGES

11.11.2 Admission to Major Programs

Admission to the Major programs in the Department of Psychology is competitive and selective. Students who wish to enter these programs must submit a completed application form, available on the Department of Psychology website in the Winter semester, to the Department of Psychology by June 1 for Fall semester registration. To be eligible for admission, students must have completed the 24 credit hours as listed below with an average of at least 65% in Psychology 1000/1001 and an overall average of at least 60% in Psychology, Critical Reading and Writing (CRW), and Mathematics or Statistics:

- 5. Psychology 1000, 1001.
- 6. Six credit hours in Critical Reading and Writing (CRW) courses, including at least 3 credit hours in English courses.
- 7. Mathematics 1000 (or equivalent) or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent).
- 8. Six credit hours of electives (9 if only Mathematics 1000 or Statistics 1500 is successfully completed).

Students who fulfil 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.

Note: Students should consult the Calendar course descriptions to determine whether Mathematics 1000 (or equivalent) is a pre-requisite for other (non-Psychology) courses they plan to take. In particular, students considering Joint Majors or Joint Honours programs should consider taking both Mathematics 1000 (or equivalent) and Statistics 1500.

11.11.4 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.

- 4. Students may Major in Psychology as part of either a B.A. or a B.Sc. program, and should consult the **Degree Regulations** for the General Degree of Bachelor of Science or the **Degree Regulations** for the General Degree of Bachelor of Arts, as appropriate. All Majors are required to complete a minimum of 42 credit hours of Psychology as listed below:
 - a. Psychology 1000, 1001, 2520 (or 2521), 2910, 2911, 2930.
 - b. Twelve credit hours in Psychology chosen from the following: 3050, 3100, the former PSYC 3250, 3251, 3350, 3450, 3620, 3650, 3750, or one of 3800, 3810, 3820, 3830, 3840 or 3860.
 - c. Twelve credit hours of 4000-level courses in Psychology, of which at least one must be a research experience course and one must be a selected topics course.
- 5. Psychology Majors following the B.Sc. program are also required to successfully complete the following:
 - a. Mathematics 1000 (or equivalent) or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent).
 - e. Biology 1001 and 1002.
 - f. Either Chemistry 1050 and 1051 (or 1200 and 1001 or 1010 and the former 1011); or Physics 1020 (or 1050) and 1021 (or 1051).

Note:

First year students should think carefully about whether Chemistry or Physics best suits their future program needs. Students should examine the prerequisites for upper-level science courses and attempt to take them in their first year.

g. Six credit hours of laboratory courses at the 2000 level or above in one of Biochemistry, Biology, Chemistry, Computer Science, Ocean Sciences or Physics. Students are advised to consult the <u>Course Descriptions</u> section of the Calendar for their chosen lab courses to ensure pre-requisites are met.

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.

6. Psychology Majors following the B.A. program are also required to successfully complete Mathematics 1000 (or equivalent), or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent), and are encouraged to complete at least 6 credit hours in Biology.

11.11.7 Requirements for Honours 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:

4.

- a. Psychology 1000, 1001, 2521, 2910, 2911, 2930, 3800, 3820, and one of 3810, 3830, 3840, or 3860.
- b. Three credit hours in Psychology chosen from the following: 3050, 3100, the former 3250, 3251, 3350, 3450, 3620, 3650, 3750.
- c. Any research experience course and one of Psychology 4250, 4251, 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.

5.

- a. Mathematics 1000 (or equivalent), or Statistics 1500, or two of Mathematics 1090, 1050, 1051 (or equivalent).
- 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.
- 6. Eighteen credit hours from the following courses chosen from at least two different sciences:
 - a. Biochemistry: Any 2000-, 3000-, or 4000-level course except the former 2000, 2005, the former 2010, the former 2011, 3202, 3402, or 4502.
 - b. Biology: Any 2000-, 3000-, or 4000-level course except 2040, 2041, 2120, 3053, or 3820.

- c. Chemistry: 2100, 2210, 2301 (or the former Chemistry 2300), 2302, 2400, 2401, 2610, or any 3000 or 4000 level course.
- d. Computer Science: Any 2000, 3000, or 4000 level course except the former 2650 and the former 2801.
- e. Ocean Sciences: any 2000-, 3000-, or 4000-level course.
- f. Mathematics: 2000, 2050, 2051, 2260, 2320, or any 3000 or 4000 level mathematics course.
- g. Medicine 310A/B.
- h. Physics: Any 2000, 3000, or 4000 level course except <u>2150,</u> 2151, 3150, 3151.

Notes:

- 3. Credit may not be obtained for both Biology 3750 and Psychology 3750 or for both Biology 4701 and Psychology 4701.
- 4. 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.

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Senate Summary Page for Programs

PROGRAM TITLE

10.2.10 Biology and Psychology (Behavioural Neuroscience) Joint Honours

RATIONALE

The Psychology Department removed Math 1001 as a requirement for the Major and Honours in Behavioural Neuroscience program last year. It appears that there was an omission in that we did not remove the course from the Biology and Psychology (Behavioural Neuroscience) Joint Honours program. Math 1001 is not required in the Biology Honours program. This calendar change corrects the omission.

In anticipation of the approval of the course proposal for Mathematics 1006, the wording "(or equivalent)" has been added to the mentions of Mathematics 1000 throughout the regulations. This wording is also captured in the proposed secondary Calendar changes for the Mathematics 1006 course, but is added here for clarity.

CALENDAR CHANGES

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:

- 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.
- Psychology 1000, 1001, 2521, 2910, 2911, 2930; one of the former PSYC 3250, 3810, 3830, 3840, or 3860; 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
- 3. Biology or Psychology 499A/B.
- 4. Biochemistry 2201 or the former 2101,3206 or 3106.
- 5. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
- 6. Mathematics 1000 (or equivalent) 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 students 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.

CALENDAR ENTRY AFTER CHANGES

10.2.10 Biology and Psychology (Behavioural Neuroscience) Joint Honours *Note:*

Students completing this program cannot receive credit for Psychology 2920. The following courses (or equivalent) are required:

- 1. Biology 1001, 1002, 2060, 2250, 2600, 2900; one of 3401, 3402, 4245, 4404; five Biology electives at the 2000, 3000 or 4000 level not including Biology 499A or 499B.
- 2. Psychology 1000, 1001, 2521, 2910, 2911, 2930; one of the former PSYC 3250, 3810, 3830, 3840, or 3860; 3800, 3820, 3900; one further course in Psychology chosen from the following: 3050, 3100, 3251, 3350, 3450, 3620, 3650, 3750; any research experience course and one of Psychology 4850, 4851, 4852, 4853, or 4854; or, any selected topics course and Psychology 4870.
- 3. Biology or Psychology 499A/B.
- 4. Biochemistry 2201 or the former 2101,3206 or 3106.
- 5. Six credit hours in **Critical Reading and Writing (CRW)** courses, including at least 3 credit hours in English courses.
- 6. Mathematics 1000 (or equivalent); 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 students 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.

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Senate Summary Page for Courses

COURSE NUMBER AND TITLE

PSYCHOLOGY 4910 Systems in Contemporary Psychology

REVISED COURSE NUMBER AND TITLE

PSYCHOLOGY 4910 History of Psychology

ABBREVIATED COURSE TITLE

History of Psychology

RATIONALE

The current course title "Systems in Contemporary Psychology" is somewhat elusive in its meaning and is often a source of confusion to students. In addition, our Psychology majors who apply to clinical psychology graduate programs are required to have completed an undergraduate course in the History of Psychology. While Psyc 4910 has been used to fulfill this requirement, it has been unclear to some committees evaluating applicants that this course is, in fact, a course in the history of psychology. The name change, then, is put forward to make the content of the course more transparent to both students and any bodies required to evaluate student transcripts.

CALENDAR CHANGES

Psychology 4910 Systems in Contemporary Psychology History of Psychology

is a study of paradigms and explanations in contemporary psychology in the context of their historical antecedents.

CO: at the St. John's campus only: PSYC 3900 or 3950, or permission of instructor

PR: 30 credit hours in Psychology courses required in a Majors program. At the Grenfell Campus only, this must include PSYC 2950.

CALENDAR ENTRY AFTER CHANGES

Psychology 4910 History of Psychology is a study of paradigms and explanations in contemporary psychology in the context of their historical antecedents.

CO: at the St. John's campus only: PSYC 3900 or 3950, or permission of instructor

PR: 30 credit hours in Psychology courses required in a Majors program. At the Grenfell Campus only, this must include PSYC 2950.

SECONDARY CALENDAR CHANGES

(Grenfell Campus)

13.25.3 Senior Courses

4910

Systems History of Psychology

is a study of paradigms and explanations in contemporary psychology in the context of their historical antecedents.

CO: At the St. John's campus only: PSYC 3900 or 3950, or permission of instructor PR: 30 credit hours in Psychology courses required in a Majors program. At the Grenfell Campus only, this must include PSYC 2950.

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Senate Summary Page for Courses

COURSE NUMBER AND TITLE

Psychology 3810 Neurobiology of Learning and Memory

RATIONALE

Currently, Psychology 3810 Neurobiology of Learning and Memory has only the 2000-level Psychology majors courses as pre-requisites. It has become evident that students taking this course would benefit greatly from taking Psychology 3800 Cellular and Molecular Neuroscience *prior to* enrolling in Psyc 3810, as the material covered in Psyc 3800 is foundational. This Calendar change adds Psyc 3800 as a pre-requisite to Psyc 3810.

CALENDAR CHANGES

Psychology 3810 Neurobiology of Learning and Memory (same as the former PSYC 3250) examines how organisms adjust their behaviour to regularities in the environment as a result of experience. Experience changes behavior by modifying the nervous system. We will take a multidisciplinary approach, combining information from psychology and neuroscience to study learning and memory. Students will gain an understanding of sensitization, habituation, and classical and operant conditioning using animal models, with a particular emphasis on the synaptic and molecular changes that occur with learning and memory.

CR: PSYC 2825, the former PSYC 3250

PR: PSYC 2520 or 2521, 2911, and 2930 or the former 2570, PSYC 3800, and

admission to a Major in Psychology or Behavioural Neuroscience

CALENDAR ENTRY AFTER CHANGES

Psychology 3810 Neurobiology of Learning and Memory (same as the former PSYC 3250) examines how organisms adjust their behaviour to regularities in the environment as a result of experience. Experience changes behavior by modifying the nervous system. We will take a multidisciplinary approach, combining information from psychology and neuroscience to study learning and memory. Students will gain an understanding of sensitization, habituation, and classical and operant conditioning using animal models, with a particular emphasis on the synaptic and molecular changes that occur with learning and memory.

CR: PSYC 2825, the former PSYC 3250

PR: PSYC 2520 or 2521, 2911, 2930 or the former 2570, PSYC 3800, and admission to a Major in Psychology or Behavioural Neuroscience

Report of the Academic Council of the	e School of Graduate Studies	



SCHOOL OF GRADUATE STUDIES

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March 21, 2023

TO: Executive Committee of Senate

FROM: Dr. Amy Warren, Chair of Academic Council

SUBJECT: Items of Business

The Academic Council, School of Graduate Studies, reviewed the following item of business on March 13, 2023 and they are being transmitted for information/approval to Senate.

CONSENT AGENDA

1. The School of Fisheries and the School of Ocean Technology

The School of Fisheries and the School of Ocean Technology of Memorial University is requesting approval of revisions to sections 25 of the University Calendar. The School of Fisheries and the School of Ocean Technology of Memorial University is seeking to create the Master of Marine Studies (Aquaculture) option and the removal of the Aquaculture Technology option from the Master of Technology Management program.

Dr. Amy Warren

Amy M. Waren

Interim Associate Vice-President (Academic) and Dean, School of Graduate Studies

MMS and Graduate Diploma in Marine Studies (Aquaculture) Calendar Regulations – using Track Changes

25 Regulations Governing the Degree of Master of Marine Studies and Graduate Diplomas in Marine Studies

- www.mun.ca/sqs/contacts/sqscontacts.php
- www.mi.mun.ca
- www.mun.ca/become/graduate/apply/app_deadlines.php

The degree of Master of Marine Studies (M.M.S.) is offered in Fisheries Resource Management (FRM), , Marine Spatial Planning and Management (MSPM) and in Aquaculture (ACUL). There are also Graduate Diplomas in Marine Studies (Fisheries Resource Management) and in Marine Studies (Aquaculture).

The Fisheries Resource Management, the Marine Spatial Planning and Management, and the Aquaculture program areas will be administered by Academic Directors appointed by the Associate Vice-President (Marine Institute), Academic and Student Affairs, together with Academic Advisory Committees.

Academic Advisory Committees for each program area will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic and Student Affairs. Each of these committees will normally consist of the Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University. Appointments are normally for a period of three (3) years.

For the Fisheries Resource Management programs, a Technical Advisory Committee consisting of a cross-section of members with professional expertise related to the fishery, will provide regular feedback on program content, instruction, and future direction of the Program.

For the Marine Spatial Planning and Management program, a Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to the ocean/marine sector, will provide regular feedback on program content, instruction, and future direction of the Program.

For the Aquaculture program, a Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to aquaculture, will provide regular feedback on program content, instruction, and future direction of the Program.

Members of these Technical Advisory Committees will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic and Student Affairs. The Academic Director will be an ex-officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

25.2 Graduate Diploma in Marine Studies (Aquaculture)

The Graduate Diploma in Marine Studies (Aquaculture) provides students with the education, training and management level skills required to participate in aquaculture development and production.

25.2.1 Admission Requirements

To be considered for admission to the Graduate Diploma in Marine Studies (Aquaculture), a student must be eligible to register in the Master of Marine Studies program (see Master of Marine Studies (Aquaculture), Admission Requirements below).

25.2.2 Program of Study

The program is offered at the Marine Institute Campus and requires successful completion of 21 credit hours of course work that includes a 12-week internship:

- AQRS 6060 Current Topics in Aquaculture
- AQRS 6061 Finfish Aquaculture
- AQRS 6062 Shellfish Aquaculture
- AQRS 6063 Aquatic Animal Health
- AORS 6064 Fish Nutrition and Feeding Practice
- AQRS 6065 Aquaculture Engineering Technology and Systems Operation
- AQRS 6101 Internship

25.2.3 Evaluation

Students for the Graduate Diploma in Marine Studies (Aquaculture) must obtain a grade of 'B' or better in all program courses. Students must complete and receive a pass (P) in the Internship.

25.X Master of Marine Studies (Aquaculture)

The Master of Marine Studies (Aquaculture) is a multi-disciplinary program providing students with exposure to the dimensions of aquaculture practice and management required to contribute to and successfully operate aquaculture development and production.

25.X.1 Admission Requirements

Admission to the program is on a limited and competitive basis.

- 1. To be considered for admission to the program an applicant will normally possess a relevant second class or better undergraduate degree from a university of recognized standing.
- 2. Up to two seats per year are reserved for applicants of Indigenous ancestry who have met the admission requirements but are not in the top ranked candidates. Applicants wishing to be considered under this Clause must check the appropriate space provided on the application form and provide documentation of Indigenous ancestry.
- 3. In exceptional cases, applicants who have not completed an undergraduate degree may be considered for admission. Preference will be given to those who have at least 10 years of relevant professional experience and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
- 4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
 - Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
 - b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher).

Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

25.X.2 Program of Study

- Students must successfully complete 36 credit hours, including an internship. Refer to the list of Courses.
- 2. Students who have successfully completed the Marine Institute Advanced Diploma in Sustainable Aquaculture within the last 10 years, and who have at least one year of recent, documented, and

- relevant industry experience will be given advanced standing credit for AQUA 6060-6065, and AQUA 6101.
- 3. Dependent upon the applicant's academic background or advanced standing status, other courses may be required by the Academic Advisory Committee.

25.X.3 Transfer of Course Credits

- 1. Students who successfully complete the Graduate Diploma in Marine Studies (Aquaculture) program may transfer the course credits earned in that program towards the Master of Marine Studies (Aquaculture).
- 2. Up to three relevant courses (9 credit hours) may be transferred into the Master of Marine Studies (Aquaculture) program from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.

25.X.4 Evaluation

- 1. Students must obtain a grade of 'B' or better in all program courses.
- 2. Students who have received a grade less than a 'B' in a program course will be permitted to remain in the program, provided the course is retaken and passed with a grade of 'B' or better. Alternatively, the student may, on the recommendation of the Academic Advisory Committee, substitute another graduate course. Only one such repeat, or substitution will be permitted in the program.
- 3. Students must complete and receive a pass (P) in the Internship.

25.X.5 Courses

AQRS 6060 Current Topics in Aquaculture

AQRS 6061 Finfish Aquaculture

AQRS 6062 Shellfish Aquaculture

AQRS 6063 Aquatic Animal Health

AQRS 6064 Fish Nutrition and Feeding Practice

AQRS 6065 Aquaculture Engineering Technology and Systems Operation

AQRS 6101 Internship

MSTM 6072 Animal Husbandry Management

MSTM 6073 Aquaculture Environmental Management

MSTM 6074 Aquaculture Site and Operational Assessment

MSTM 6075 Aquaculture Engineering Technology Management

TECH 6022 Communication and Conflict Resolution in a Technical Environment

MMS and Graduate Diploma in Marine Studies (Aquaculture) Calendar Regulations – clean copy

25 Regulations Governing the Degree of Master of Marine Studies and Graduate Diplomas in Marine Studies

- www.mun.ca/sgs/contacts/sgscontacts.php
- www.mi.mun.ca
- www.mun.ca/become/graduate/apply/app_deadlines.php

The degree of Master of Marine Studies (M.M.S.) is offered in Fisheries Resource Management (FRM), Marine Spatial Planning and Management (MSPM) and in Aquaculture (ACUL). There are also Graduate Diplomas in Marine Studies (Fisheries Resource Management) and in Marine Studies (Aquaculture).

The Fisheries Resource Management, the Marine Spatial Planning and Management, and the Aquaculture program areas will be administered by Academic Directors appointed by the Associate Vice-President (Marine Institute), Academic and Student Affairs, together with Academic Advisory Committees.

Academic Advisory Committees for each program area will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic and Student Affairs. Each of these committees will normally consist of the Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University. Appointments are normally for a period of three (3) years.

For the Fisheries Resource Management programs, a Technical Advisory Committee consisting of a cross-section of members with professional expertise related to the fishery, will provide regular feedback on program content, instruction, and future direction of the Program.

For the Marine Spatial Planning and Management program, a Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to the ocean/marine sector, will provide regular feedback on program content, instruction, and future direction of the Program.

For the Aquaculture program, a Technical Advisory Committee, consisting of a cross-section of members with professional expertise related to aquaculture, will provide regular feedback on program content, instruction, and future direction of the Program.

Members of these Technical Advisory Committees will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic and Student Affairs. The Academic Director will be an ex-officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

25.2 Graduate Diploma in Marine Studies (Aquaculture)

The Graduate Diploma in Marine Studies (Aquaculture) provides students with the education, training and management level skills required to participate in aquaculture development and production.

25.2.1 Admission Requirements

To be considered for admission to the Graduate Diploma in Marine Studies (Aquaculture), a student must be eligible to register in the Master of Marine Studies program (see <u>Master of Marine Studies (Aquaculture)</u>, Admission Requirements below).

25.2.2 Program of Study

The program is offered at the Marine Institute Campus and requires successful completion of 21 credit hours of course work that includes a 12-week internship:

- AQRS 6060 Current Topics in Aquaculture
- AQRS 6061 Finfish Aquaculture
- AQRS 6062 Shellfish Aquaculture
- AQRS 6063 Aquatic Animal Health
- AQRS 6064 Fish Nutrition and Feeding Practice
- AQRS 6065 Aquaculture Engineering Technology and Systems Operation
- AQRS 6101 Internship

25.2.3 Evaluation

Students for the Graduate Diploma in Marine Studies (Aquaculture) must obtain a grade of 'B' or better in all program courses. Students must complete and receive a pass (P) in the Internship.

25.X Master of Marine Studies (Aquaculture)

The Master of Marine Studies (Aquaculture) is a multi-disciplinary program providing students with exposure to the dimensions of aquaculture practice and management required to contribute to and successfully operate aquaculture development and production.

25.X.1 Admission Requirements

Admission to the program is on a limited and competitive basis.

- 1. To be considered for admission to the program an applicant will normally possess a relevant second class or better undergraduate degree from a university of recognized standing.
- 2. Up to two seats per year are reserved for applicants of Indigenous ancestry who have met the admission requirements but are not in the top ranked candidates. Applicants wishing to be considered under this Clause must check the appropriate space provided on the application form and provide documentation of Indigenous ancestry.
- 3. In exceptional cases, applicants who have not completed an undergraduate degree may be considered for admission. Preference will be given to those who have at least 10 years of relevant professional experience and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
- 4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
 - a. Test of English as a Foreign Language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
 - b. International English Language Testing System (IELTS) and achieve a score of 7 (or higher). Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.

25.X.2 Program of Study

- 1. Students must successfully complete 36 credit hours of course work, including an internship. Refer to the list of **Courses**.
- Students who have successfully completed the Marine Institute Advanced Diploma in Sustainable Aquaculture within the last 10 years, and who have at least one year of recent, documented, and relevant industry experience will be given advanced standing credit for AQUA 6060-6065, and AQUA 6101.
- 3. Dependent upon the applicant's academic background or advanced standing status, other courses may be required by the Academic Advisory Committee.

25.X.3 Transfer of Course Credits

- 1. Students who successfully complete the Graduate Diploma in Marine Studies (Aquaculture) program may transfer the course credits earned in that program towards the Master of Marine Studies (Aquaculture).
- 2. Up to three relevant courses (9 credit hours) may be transferred into the Master of Marine Studies (Aquaculture) program from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.

25.X.4 Evaluation

- 1. Students must obtain a grade of 'B' or better in all program courses.
- 2. Students who have received a grade less than a 'B' in a program course will be permitted to remain in the program, provided the course is retaken and passed with a grade of 'B' or better. Alternatively,

the student may, on the recommendation of the Academic Advisory Committee, substitute another graduate course. Only one such repeat, or substitution will be permitted in the program.

3. Students must complete and receive a pass (P) in the Internship.

25.X.5 Courses

AQRS 6060 Current Topics in Aquaculture

AQRS 6061 Finfish Aquaculture

AQRS 6062 Shellfish Aquaculture

AQRS 6063 Aquatic Animal Health

AQRS 6064 Fish Nutrition and Feeding Practice

AQRS 6065 Aquaculture Engineering Technology and Systems Operation

AQRS 6101 Internship

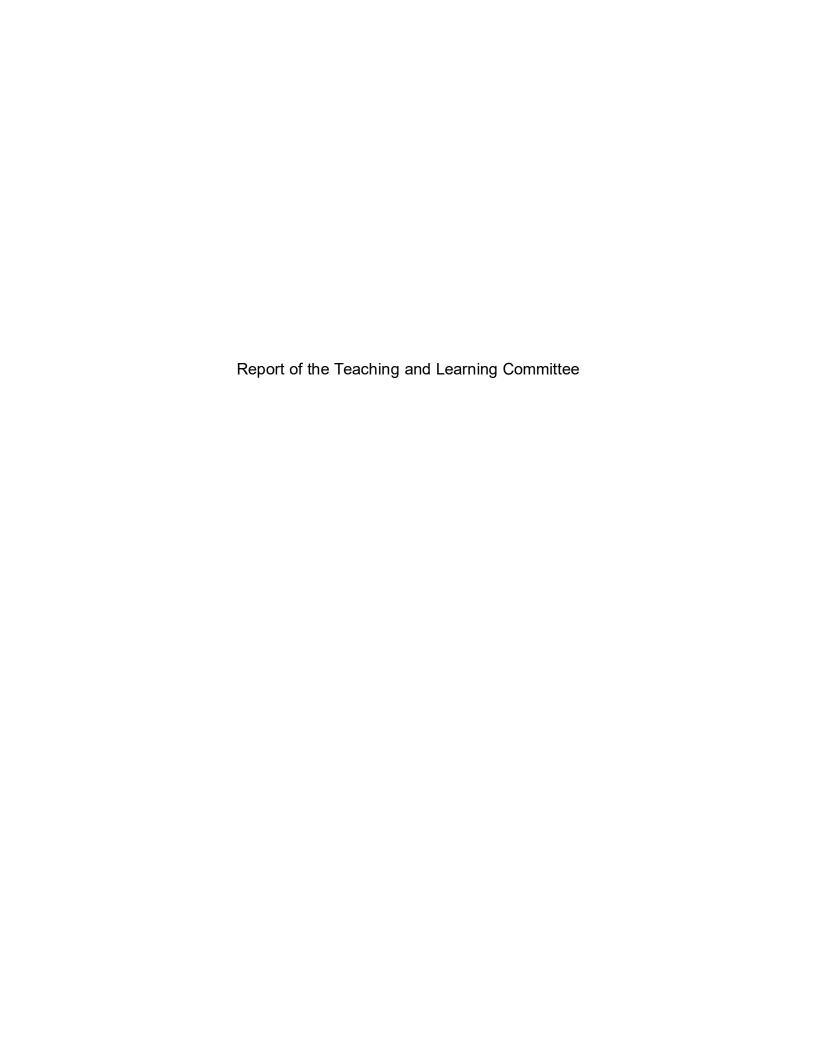
MSTM 6072 Animal Husbandry Management

MSTM 6073 Aquaculture Environmental Management

MSTM 6074 Aquaculture Site and Operational Assessment

MSTM 6075 Aquaculture Engineering Technology Management

TECH 6022 Communication and Conflict Resolution in a Technical Environment



Summary

This motion asks members of Senate to approve three categories of experiential learning (these are: work-integrated learning; community engaged learning; and experiential learning) for notation on a student's transcript. Adoption of this motion will help identify to students and communicate to those who review graduates' transcripts the for-credit learning experiences where students engaged in experiential learning, over the course of their studies at the university.

Motion

WHEREAS, Memorial University has an established history of offering curricular experiential learning, most notably work-integrated learning facilitated, in part, through co-op work terms and clinical placements; and

WHEREAS, Students are enrolled today in programs and courses where experiential learning, other than work-integrated learning, is a component of the taught curricula; and

WHEREAS, Experiential learning, when incorporated into curricular learning experiences has been demonstrated to enhance students' perceptions of engagement and allow for the application of theory in authentic settings; and

WHEREAS, Experiential learning and community-engaged learning are deemed institutional priorities in the most recent university strategic plan; and

WHEREAS, A 2019 taskforce on EL proposed definitions for St. John's campus; and

WHEREAS, A 2022 pan-institutional working group reviewed and revised the proposed categories of EL, ensuring relevance across the institution and the diversity of learning experiences facilitated across our campuses; and

WHEREAS, The proposed categories are not meant to limit the kinds of EL that can be facilitated in a classroom; therefore, be it

RESOLVED, That three categories of experiential learning (work-integrated, community engaged and experiential) are adopted; and be it

RESOLVED, That these categories are noted on students' transcripts, when the student successfully completes a course with learning experiences that fit within one of these three categories.

Proposed categories of Experiential Learning

Three categories of experiential learning courses to be noted on a transcript are proposed:

- 1. Work-integrated learning (e.g., co-op, internships) (WIL);
- Community-engaged learning (e.g., organized service to help the community which is connected directly to courses and linked to credits) (CEL); and
- 3. Experiential learning (i.e., all remaining experiential learning opportunities) (EL).

1. Work-integrated learning

Courses defined as WIL include:

- <u>Co-op or work term placements</u>, where students learn in a workplace setting that is related to the student's discipline of study.
- <u>Internships</u>, where students participate in a discipline-specific, academically supervised and assessed, paid or unpaid part-time or full-time work experience that may extend over more than one term.
- <u>Clinical practicums or placements</u>, where students participate in mandatory, disciplinespecific, integrated, practice-based work experience that may be required for professional licensing or certification.
- <u>Student teaching</u>, where students are engaged in practice teaching, taking on rolesand responsibilities of a teacher, often in a K-12 setting.

2. Community engaged learning

Courses defined as CEL include courses where students:

- analyze and solve community challenges that match what they are studying in the curriculum.
- have opportunities for engagement rather than completing administrative tasks.
- apply both what they are learning in real-world settings and reflect in a classroom setting on their service experiences, to produce meaningful outcomes in personal, academic, and civic learning.
- receive regular feedback from service organizations and course instructors.

3. Experiential learning

Courses defined as experiential learning include intentionally integrate experiential activities and include, but are not limited to:

- Academic exchange, where students engage in international study for academic credit, formally assessed as part of the student's academic program.
- <u>Field school or field courses</u>, where students engage in mentored field research and/or skills learning (including technical and safety skills acquisition), inside or outsideCanada.
- <u>Indigenous land-based or water-based learning</u>, where students engage in Indigenous- led
 experiential education outside the classroom on the lands and waters, through a specific
 Indigenous pedagogical approach, reflective of and driven by Indigenous cultures, histories,
 languages, and ways of knowing, doing, and being.
- Artistic activities, performance, or exhibit, where students engage in the creation of artistic, physical, technical, management or production skills through intensiveembodied or practicebased experiences leading to academic credit.
- <u>Labs</u>, a course component where students apply course concepts through observation and testing.
- Original research, where students develop and complete original research under academic supervision extending at least one term or beyond and designed to examine a specific problem or question.
- <u>Simulations</u>, where students engage with academic content through specific activities such
 as simulations, demonstrations, archival or design work, role play and/or case studies that
 require intensive hands-on practice.
- <u>Publication</u>, where students publish an original work or contribute to a publication inan editorial, original author or co-author capacity, including open-access publishing.

Definitions adapted from Examples of EL, Report of the St. John's Campus Task Force on Experiential Learning (2019).

Background

Experiential learning (EL), broadly speaking, is theorized as "teaching and learning situations when educators deliberately plan learning in which the learners have primary experiences of the external world" (Jarvis, Holford & Griffin, 2003, p. 67). More succinctly, experiential learning can be described as *learning by doing*.

Memorial University has a long history with providing rich experiential learning opportunities to students. With the first co-op program offered in 1969 in the Faculty of Engineering, Memorial has been recognized as one of the first Canadian institutions to offer work-integrated learning. In courses where meaningful experiential learning is deliberately included, students describe gaining first-hand experience applying skills they learned in the classroom to real-world issues (Berard & Ravelli, 2021). Research also suggests a connection between (enhanced) student engagement and courses that incorporate experiential learning (see Park, Jeong, Lee & Cullen, 2020; Li, Öchsner & Hall, 2019; Yusof et al., 2020, for findings that articulate this relationship across multiple disciplines). As a result, incorporating meaningful experiential learning into course and program curricula is seen to enhance the student learning experience, an aim of the university's 2018-2023 Teaching and Learning framework.

While experiential learning has been incorporated directly into Memorial program curricula for over 50 years, *Transforming our Horizons* specifically called out experiential learning as a way to advance the needs of the province through community-engaged learning, and help meet the institutions goals related to the proactive programs strategic priority. As a result, it can be expected that more opportunities will be developed for students to engage in experiential learning over the period of the strategic plan.

Timeline

2019

The Associate Vice President (Academic), Students and the Associate Vice President, Teaching and Learning struck a task force on experiential learning on St. John's campus (fall, 2019). The goal of the task force was to propose definitions of experiential education contextualized to campus practice. Membership included faculty, students and staff representatives from Student Life, Centre for Innovation in Teaching and Learning, Centre for Social Enterprise, Faculty of Business, Faculty of Human Kinetics

& Recreation, Faculty of Medicine, and Co-operative Education. The task force returned a report, with a framework for EL and definitions in late 2020.

2021

Transforming our Horizons was launched in 2021, with community engaged learning and experiential learning specifically identified within the framework. With Memorial's long-standing focus on work-integrated learning (including work term placements, internships, clinical placements, and student teaching) the strategic plan's articulation of community engaged learning helped delineate the proposed three categories of EL.

2022

In the spring of 2022, a pan-institutional working group, by request of the Associate Vice President (Academic), Students and the Associate Vice President, Teaching and Learning, came together to review the categories and definitions. With representatives from MI, Grenfell, Labrador and St.

John's campuses, definitions were revised to include the varied contexts of all Memorial campuses.

Questions

Q: I teach with an experiential education method that's not listed. Is this an exhaustive list of experiential learning, and would the course I teach be excluded?

A: If you teach a course that incorporates experiential learning that is not listed amongst the activities and approaches in the EL category it is still experiential learning, and the course could be categorized as such. The EL category is intended to be inclusive of any EL (that isn't work-integrated learning or community engaged learning), and the list of activities provided are examples of kinds of EL. This is meant to be addressed, in part, with the statement that precedes the list "...include, but are not limited to."

Q: How will courses be identified?

A: The process of identifying courses is an adjacent process to the approval of the categories of EL, and not directly addressed in this motion. The Office of the Registrar, however, has been a member of the planning process since 2022 and it is expected

that any identification would use current processes (e.g., the course audit process or new course proposal).

Q: Will there be any kind of audit process for courses identified as including experiential learning?

A: While direct questions of implementation are outside the scope of this agenda item, there will not be any auditing of courses identified as including experiential learning. Academic units will add and remove courses from any institution list at their discretion, through a regular process.

Q: How has institutional priorities of EDI-AR and Indigenization been considered?

A: Within the context of indigenization, land-based and water-based learning is EL informed by indigenous ways of knowing, and these have been included in the list of example activities. From the perspective of EDI-AR, we know that for many equity-deserving students, EL can be an exclusionary experience. As identified in Mitchell et al. (2012), the institution also can consider how these curricular experiences can be locus for critical engagement with race. Adopting the categories would be a first step in being able, as an institution, to understand who accesses, experiences and benefits from EL.

Last updated: January 9, 2023

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