MEMORIAL UNIVERSITY OF NEWFOUNDLAND
Academic Council of the School of Graduate Studies
Minutes, Meeting of November 18, 2019

PRESENT: A. Surprenant (Chair), D. Farquharson, P. Coady, T. MacKenzie, E. Haven, R. Joy, J. Rodway, AM Sullivan, D. Howse, A. Dorward, H. Liu, C. Bottaro, A. Variyath, V. Kavanagh, M. Cheema, C. Forbes, M. McKibbon, E. Pittman, A. Kim

APOLOGIES: D. Moralejo, A. Lang, S. Cadigan, B. Beardsworth, J. Martinec, C. Badenhorst, R. Shannahan, R. Gosine

1. MINUTES

It was moved by D. Farquharson and seconded by P. Coady, that the minutes of the meeting held October 21, 2019, be approved as circulated. The motion

CARRIED

2. BUSINESS ARISING

3. CORRESPONDENCE

4. DEAN'S REPORT/REPORT OF SENATE

a) At its regular meeting of Senate on November 12, all items from the September and October meetings of Academic Council were approved. Units will be notified of the items that were approved.
b) At the Senate meeting, the President indicated that there was no update on the budget.
c) A Post-Secondary Education Committee will be conducting a review on the province's post-secondary education system and will be accepting submissions from those interested in participating. More information will follow.
d) A Search Committee for a new Associate Dean, School of Graduate Studies has been appointed. This search will be internal and a call for applications will be distributed to the University community very soon.
e) The Student Wellness and Counselling Centre has produced a one-page information sheet for what faculty can do if they find a student in stress, and contacts for various resources. This information will be distributed widely.
f) SGS now has an in-tern Counsellor located in the SGS office, and by all accounts they have been very busy.
g) The SGS Holiday Reception is scheduled for Wednesday, December 11, 2:00 pm – 4:00 pm.
h) SGS will hold its 2020 inaugural ROCKstar Supervisor event as a continuing effort to do more to support and recognize faculty supervisors. SGS will annually acknowledge the superb supervisor and the selection process will be up to each unit for which there will be one nomination per unit.

5. REPORT OF THE GRADUATE STUDENTS' UNION

a) The application deadline date is approaching for the General Manager for Bitters.
b) Mental Health Tool Kits are now available to the University Community.

6. a) Academic Council Executive

i. Archaeology

Archaeology requests approval of revisions to sections 8.6.2 and 36.2.2, which removes obsolete courses that have not been taught for some time and which will not be offered in the foreseeable future. The number changes will illustrate more clearly the relationship between the course numbers being changed. Special Topics numbers 6680//6685/6686 are being proposed as new regular courses.

It was moved by Echo Pittman and seconded by Victoria Kavanagh that the proposed revisions be approved. The motion

CARRIED

Sections 8.6.2 and 36.2.2.

Calendar Change(s)

6000 Theory and Method in the Study of Archaeology and Prehistory (same as the former 6411)
6001 Interpretative Methods in Archaeology (same as the former 6700)
~~6020 Bioarchaeology~~
~~6040 Human Osteology~~
6095 Advanced Studies in Ethnohistory *(same as History 6095)*
~~6151 Palaeoethnobotany~~
~~6181 Palaeoeskimo Cultures of the Eastern Arctic~~
~~6182 Advances in Material Culture Analysis~~
~~6187 Readings in Maritime Provinces Prehistory~~
~~6189 Palaeopathology~~
6191 Approaches to Early Modern Material Culture
~~6192 Conservation Method and Theory~~
~~6290 Newfoundland and Labrador Prehistory~~
~~6310 Economic Analyses in Archaeology~~
~~6320 Ethnoarchaeology~~
~~6330 Archaeological Field Conservation~~
6409 History of ~~Science and~~ Archaeology
~~6411 Theory and Method in the Study of Archaeology and Prehistory~~
~~6500 Special Topics in Historical Archaeology *(prerequisite 6191)*~~

6680 Space, Place and Landscape
6680-6699 (excluding 6680, 6685, 6686, 6687) Special Topics in Archaeology ~~and Prehistory~~
6685 When World's Meet: Nature/Culture and Ontological Conflicts
6686 Archaeology of the Body
6687 Applied Archaeological Sciences
~~6700 Interpretative Methods in Archaeology~~
~~6701 Interpretative Methods in Historical Archaeology~~
~~6890 Graduate Seminar~~

Secondary Calendar Changes
None

Calendar Entry After Changes
6000 Theory and Method in the Study of Archaeology and Prehistory (same as the former 6411)
6001 Interpretative Methods in Archaeology (same as the former 6700)
6095 Advanced Studies in Ethnohistory *(same as History 6095)*
6191 Approaches to Early Modern Material Culture
6409 History of Archaeology
6680 Space, Place and Landscape
6680-6699 (excluding 6680, 6685, 6686, 6687) Special Topics in Archaeology
6685 When World's Meet: Nature/Culture and Ontological Conflicts
6686 Archaeology of the Body
6687 Applied Archaeological Sciences

ii. Biochemistry

Biochemistry is requesting approval of revisions to section 27.6. of the University Calendar which proposes to include an oral defence as part of the requirements for the M.Sc. in Biochemistry.

It was moved by Echo Pittman and seconded by Asokan Variyath that the proposed revisions be approved.

Discussion:

SGS expects more units to come through with an oral component at the Master's level, which will be administered within the unit and will have a proceed/do not proceed to submitting the thesis for examination. SGS will communicate with the unit as they see the first few students go through this process and will consider possible adjustments to the General Regulations if deemed necessary. Concern was also raised about the ramifications for students who are assessed under the 'do not proceed'. It was noted that the intent is to have another level of discussion at the departmental level before a thesis is submitted for examination to SGS.

On the call for question, the motion (1 opposed)

CARRIED

25.6.2 Program of Study

1. The program of a student for the M.Sc. Degree shall be the responsibility of the supervisory committee, composed of the Supervisor and at least two other faculty members recommended with the concurrence of the Supervisor by the Head of the Department or delegate.
2. All students must enrol in Biochemistry 6999 (Seminars in Biochemistry and Food Science), and must complete Biochemistry 7000 (Graduate Skills) plus a minimum of 6 credit hours of graduate courses with a minimum B grade. Depending on the background and/or area of specialization, a student's program may include additional courses taken for credit in Biochemistry, Food Science, or related subjects.
3. It is the responsibility of the student to arrange regular meetings with the student's supervisory committee. A semi-annual report, prepared by the Supervisor and signed by all members of the supervisory committee, is required to be given to the Head of the Department or delegate.
4. *M.Sc. students are required to complete a M.Sc. Oral Defence of their thesis research. The defence will be examined by the Supervisory Committee (at least three voting members) and chaired by the non-voting Deputy Head (Graduate), or delegate. The Defence and first round of questions will be open to the public; the second round of questions will be in camera. Outcomes of the Defence will be:*
    a. *"Proceed"—proceed to submission of thesis to SGS for examination; or*
    b. *"Do not proceed"—the supervisory committee will convene to make a final recommendation on the student's overall program as per SGS Regulations 4.9.3.1 and 4.13.1(f).*
5. *The M.Sc. Degree program will conclude with a thesis examination as prescribed in the Regulations Governing the Degree of Master of Science.*

iii. Physics

Physics is requesting approval of revisions to section 36.31 governing Physics and Physical Oceanography which include minor revisions, as well as replacing the current PhD programs in 'Atomics and Molecular Physics' and in 'Condensed Matter Physics' with a PhD program in 'Physics'; and the addition of required courses for those students transferring from a M.Sc. to Ph.D. program.

It was moved by Echo Pittman and seconded by Derek Howse that the proposed revisions be approved. The motion

CARRIED

36.31 Physics and Physical Oceanography
www.mun.ca/sgs/contacts/sgscontacts.php
www.mun.ca/science
www.mun.ca/physics

The following Departmental Regulations are supplementary to the **General Regulations** governing ~~the M.Sc. and~~ Ph.D. degrees. ~~A thorough familiarity with the latter Regulations should be regarded as the prerequisite to further reading in this section.~~

The Degree of Doctor of Philosophy (Ph.D.) is offered in Physical Oceanography and in Physics. The Department also participates in the interdisciplinary Ph.D. programs in **Environmental Science**, in **Scientific Computing**, and in **Theoretical Physics**.

~~The Department of Physics and Physical Oceanography compiles, and regularly reviews, a brochure which contains reasonably detailed descriptions of currently active research projects, as well as a comprehensive listing of recent research publications, and other material which may be of interest to prospective graduate students.~~

36.31.1 Program of Study

~~The Degree of Doctor of Philosophy (Ph.D.) is offered in Atomic and Molecular Physics, Physical Oceanography in Condensed Matter Physics, and in Theoretical Physics.~~

~~A program of study for the Ph.D. Degree in Atomic and Molecular Physics, Condensed Matter Physics or in Physical Oceanography shall normally include a minimum of 9 graduate credit hours, beyond those required for the M.Sc. Degree. However, depending on the student's background and area of specialization, more or fewer graduate and/or undergraduate courses may be required.~~

1. Course Requirements for the Ph.D. Degree in Physical Oceanography

   Course requirements shall normally include a minimum of 9 graduate credit hours. At least 6 of these credit hours shall be selected from courses numbered 6300-6399 in the list in Section 36.31.2. For students who have transferred from the M. Sc. degree program in Physical Oceanography (see **Section 4.1.3.1a** of the General Regulations), a minimum of 15 credit hours are required (including courses completed while enrolled in the M.Sc. program), of which at least 12 shall be selected from courses numbered 6300-6399 in the list in Section 36.31.2.

2. Course Requirements for the Ph. D. Degree in Physics

   Course requirements shall normally include a minimum of 9 graduate credit hours. At least 6 of these credit hours shall be selected from the list in Section 36.31.2. For students who have transferred from the M. Sc. degree program in Physics (see **Section 4.1.3.1a** of the General Regulations), a minimum of 15 credit hours are required (including courses completed while enrolled in the M.Sc. program), of which at least 12 shall be selected from the list in Section 36.31.2.

3. In exceptional circumstances, modifications to these course requirements as stated in 1 and 2 can be approved by the Departmental Graduate Studies Committee.

4. Comprehensive Examination

   The ~~A~~ Comprehensive Examination (as prescribed under **Section 4.8.2** of the General Regulations ~~**Comprehensive Examinations**~~) shall be an oral one, and ~~may~~ will include the submission and presentation of a written research proposal.

5. ~~The **Ph.D. Program in Theoretical Physics** is an interdisciplinary program offered jointly~~

~~with the Department of Mathematics and Statistics. The regulations for this program are described under the **Regulations Governing the Degree of Doctor of Philosophy – Theoretical Physics**~~

Thesis

The Ph.D. degree program will conclude with the submission of a thesis based on original research and an oral defense of the thesis, as prescribed in **Section 4.10** of the General Regulations.

36.31.2 Courses

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

- 6000 Condensed Matter Physics I
- 6001 Condensed Matter Physics II
- 6002 Superconductivity
- 6003 Path Integral Techniques in Condensed Matter Physics
- 6010-19 Special Topics in Condensed Matter Physics

i. 6040 Biophysics

(1) 6060-69 Special Topics in Interdisciplinary Areas
(2) 6200 Nonlinear Dynamics
(3) 6308 Ocean Dynamics I
(4) 6309 Ocean Dynamics II
(5) 6310 Physical Oceanography
(6) 6313 Physical Fluid Dynamics
(7) 6314 Field Oceanography
(8) 6315 Polar Oceanography
(9) 6316 Ocean Measurements and Data Analysis
(10) 6317 Ocean Acoustics
(11) 6318 Numerical Modelling
(12) 6319 Climate Dynamics
(13) 6320 Turbulence
(14) 6321 Coastal Oceanography
(15) 6322 Stratified Fluids
(16) 6323 Stability Theory
(17) 6324 Models in Ocean Ecology
(18) 6360-69 (excluding 6363) Special Topics in Physical Oceanography
(19) 6363 Laboratory Experiments in Geophysical Fluid Dynamics
(20) 6400 Statistical Mechanics
(21) 6402 Theory of Phase Transitions
(22) 6403 Stochastic Processes, Time-Dependent and NonEquilibrium Statistical Mechanics
(23) 6413 Soft Matter Physics
(24) 6502 Electrodynamics
(25) ~~6720 Theory of Molecules~~

(26) 6721 Molecular Spectroscopy
(27) 6722 Light Scattering Spectroscopy
(28) 6730 Molecular Theory of Liquids and Compressed Gases
(29) 6740 Physics of Atomic Collisions
(30) 6760-69 Special Topics in Atomic and Molecular Physics
(31) 6800 Group Theory
(32) 6810-19 Special Topics in Theoretical and Mathematical Physics
(33) 6850 Quantum Mechanics I
(34) 6851 Quantum Mechanics II
(35) 6900 Techniques in Experimental Condensed Matter Physics
(36) 6910-19 Special Topics in Experimental and Applied Physics

Table of Credit Restrictions - Physics and Physical Oceanography

ii. (Credit may be obtained for only one course from each of the pairs of courses listed in this table.)

Present Course	**Former Course**	**Present Course**	**Former Course**
6000	6050	6318	6304
6001	6051	6321	6303
6002	6822	6321	6304
6003	6820	6323	6303
6200	6821	6402	6401
6308	6312	6403	6401
6309	6311	6403	6824
6313	6301	6502	6500
6316	6302	6502	6501
6317	6823	6722	6790

Members of the Department carry out research in several areas of experimental and theoretical physics, including atomic and molecular physics, condensed matter physics, physical oceanography, theoretical geophysics and applied nuclear physics. In atomic and molecular physics, there are experimental programs in collision-induced infrared absorption spectroscopy, electron emission spectroscopy of simple molecules, molecular ions and free radicals, laser-induced fluorescence spectroscopy, and Raman spectroscopy, and theoretical work on atomic and molecular collisions. The

~~work in condensed matter physics includes experimental programs in solid state nuclear magnetic resonance on systems of biophysical interest, Raman spectroscopy of lipid bilayers and membranes, studies of phase transitions using Brillouin and Raman spectroscopy, studies of instabilities and pattern formation in simple fluid dynamical systems, and spectroscopic studies of molecular crystals. Theoretical condensed matter physics research involves studies of magnetism, superconductivity, and the statistical mechanics of polymers and lipid bilayers. The Physical Oceanography group carries out field and laboratory research on several projects which take advantage of Newfoundland's unique oceanographic environment, using acoustic and other remote sensing techniques. These include studies of circulation on the Newfoundland and Labrador shelves, Labrador current dynamics, fjord dynamics, submarine canyons and sediment transport dynamics in the nearshore zone and on the shelf. Theoretical oceanographic studies involve the modelling of ocean circulation, gravity wave phenomena and other aspects of ocean dynamics. Research in theoretical geophysics is concentrated on whole-Earth dynamics, with special emphasis on the physics of the liquid core (the Earth's "third ocean") as inferred from its wave spectrum and the associated momentum transfer to the deformable solid parts of the Earth. In nuclear physics, research is done on the atmospheric concentrations of radioactive elements and on dosimetry for medical applications.~~

Note: For Geophysics, see **Earth Sciences**.

iv . Education

Education is requesting approval of proposed new course ED 6470, and its addition to section 12.9 of the Courses section.

It was moved by Echo Pittman and seconded by Rhonda Joy that the proposed new course and calendar revision be approved. The motion

CARRIED

Section 12.9

Course descriptions for graduate courses in Education are available at the Faculty of Education graduate website. A selection of the following graduate courses shall be offered to meet the requirements of students, as far as the resources of the Faculty allow.

- 6100 Research Designs and Methods in Education
- 6105 Social and Cultural Difference and Education
- 6106 Popular Culture and Literacy Education
- 6107 Arts Education: Creativity in the Classroom
- 6108 Literacy and Language Education: Sociocultural Perspectives
- 6202 Social Context of Educational Leadership
- 6203 Leadership: Theory and Practice
- 6204 Educational Administration: Theory and Practice
- 6205 Educational Policy: Theory and Practice
- 6290 Research and Development Seminar in Educational Leadership Studies
- 6291 Internship in Educational Leadership Studies (6 credit hours)
- 6292 Project in Educational Leadership Studies (6 credit hours)
- 6293 Paper Folio in Educational Leadership Studies (6 credit hours)
- 6300 Teaching and Learning

- 6321 Supervisory Processes in Education
- 6330 Educational Finance
- 6335 Legal Foundations of Educational Administration
- 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
- 6391 Internship in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6392 Project in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6393 Paper Folio in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6394 Biographical Explorations of Teaching and Learning
- 6410 Seminar on Philosophical Issues in Educational Policy and Leadership
- 6420 Ethical Issues and Perspectives in Educational Practice and Policy
- 6425 Comparative Perspectives in Public Education, Reform, and Leadership
- 6426 Computer Applications in Educational Administration
- 6427 School Community Partnerships
- 6440 Family-School Relations: Leadership and Policy Implications
- 6461 Graduate Research Writing
- 6462 Cultural Landscapes, Knowledge and Pedagogy
- 6463 Relationships First: Rethinking Educational Engagement *(credit may be obtained for only one of 6463 or 6936)*
- 6465 School Violence: Leadership and Policy Implications
- 6466 Qualitative Research Methods
- 6467 Quantitative Research Methods
- 6468 Critical Approaches to Educational Research
- 6469 Theoretical and Methodological Foundations of Action Research
- 6470 Word and Sentence Level Reading Development and Instruction
- 6502 Contexts of Music Education
- 6503 Teaching Music from the Podium
- 6504 Musicianship, Pedagogy, and Learning
- 6590 Research and Development Seminar in Information Technology in Education
- 6600 Learning and Motivation
- 6602 Curriculum Studies
- 6603 Place, Ecology and Education
- 6610 Research on Computers in the Curriculum
- 6615 Educational Software Prototyping and Evaluation
- 6620 Issues and Trends in Educational Computing
- 6630 Critical Issues in Mathematics Education
- 6632 Current Research in Teaching and Learning of Elementary School Mathematics *(prerequisite: 6630)*
- 6634 Teaching and Learning to Solve Mathematics Problems *(prerequisite: 6630)*
- 6635 Teaching and Learning Geometry
- 6636 Teaching and Learning the Concept of Number and Operations
- 6639 Technology and the Teaching and Learning of Mathematics *(prerequisite: 6630)*
- 6641 Writing in the Primary, Elementary and Secondary Schools
- 6642 Developmental Reading (K-8)
- 6643 Contemporary Issues in Intermediate and Secondary English
- 6644 Drama in Education
- 6645 Literature for Children and Adolescents
- 6646 Literature in the Secondary School
- 6647 Diagnosis and Remediation of Reading and Writing Difficulties
- 6649 Exploring Multiple Literacies
- 6653 Contemporary Issues in Science Education I
- 6655 The Nature of Science and Science Education
- 6658 Teaching and Learning Scientific Concepts, Laws, and Theories
- 6660 Information Technology
- 6661 Applications of Media in Education

- 6662 Research Seminar in Teacher-Librarianship
- 6663 The Organization of Learning Resources
- 6664 Seminar in School Improvement
- 6668 Current Issues in Second Language Education
- 6669 Graduate Seminar in Second Language Teaching and Learning
- 6670 Teaching and Learning Social Studies
- 6671 Research in Social Studies Education
- 6672 Issues and Trends in Social Studies
- 6673 Second Language Teaching, Learning and Curriculum *(credit may be obtained for only one of Education 6673, the former 6665 or 6667)*
- 6674 Research in Second Language Writing Education
- 6675 Current Issues in Rural Education
- 6676 Research and Practice in TESL/TEFL (Teaching English as a Second/Foreign Language)
- 6693 Literacy for the Young Child in Home and School
- 6700 Ethical and Legal Issues in Counselling
- 6701 Issues and Methodologies in Learning and Developmental Research
- 6702 Counselling: Theory and Practice
- 6705 Nature and Development of School Counselling Services
- 6706 Career Education and Career Counselling
- 6707 Assessment for Counsellors
- 6708 Group Counselling: Theory and Practice
- 6709 Assessment of Intelligence and Learning Skills
- 6710 Issues in Development and Implementation of Special Education Policy and Practices
- 6711 Behaviour Modification in the Educational Setting
- 6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
- 6713 Educational Applications of Contemporary Cognitive Psychology
- 6714 Principles and Practices in Exceptionality
- 6715 The Theory and Practice of Peer Helping Programs
- 6716 Working with Families and Parents
- 6717 Counselling Adolescents
- 6718 Elementary School Counselling
- 6719 Cultural Issues in Counselling
- 6720 Internship in Counselling Psychology (9 credit hours)
- 6755 Nature and Assessment of Learning Disabilities
- 6801 Foundations of Post-Secondary Programs
- 6802 Adult Learning and Development
- 6803 Research in Post-Secondary Education
- 6804 Leadership and Human Resource Development in Post-Secondary Education
- 6805 Advanced Human Resource Communications
- 6806 Interprofessional Education in the Health Professions
- 6807 Economics and Finance of Post-Secondary Education
- 6822 Foundations of Instructional Design in Post-Secondary Education
- 6823 Principles of Program Design and Development
- 6831 Organization and Administration of Student Services for the Adult Learner
- 6832 Issues and Trends in the Administration of Post-Secondary Education
- 6841 Student Development Theory, Services and Programs in Post-Secondary Education
- 6890 Research and Development Seminar in 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, 6938, and 6940)

- 6913 Putting Action Research Methodologies into Practice *(prerequisite: 6469 Theoretical and Methodological Foundations of Action Research)*
- 6923 Perspectives in Indigenous Education
- 6924 Decolonizing Pedagogies
- 6927 Digital Game-based Learning
- 6931 Educational Technology Law
- 6932 Intellectual Technology Law in Teaching and Learning
- 6938 Advanced Individual Counselling: Theory and Practice (*prerequisite 6702 and 6708*)
- 6940 Administration of Student Services in Post-Secondary Education

v . Marine Institute

The Marine Institute is requesting approval of the proposed new programs – Master of Applied Ocean Technology (Ocean Mapping) and the Graduate Diploma in Applied Ocean Technology (Ocean Mapping). The Review Committee report; proponent's response and proposal were circulated for information.

It was moved by Echo Pittman and seconded by Derek Howse that the proposed new programs be approved.

Discussion

During the review of the proposed new programs concern was raised regarding resources for this program with respect to more time to better develop the new courses, and new faculty. A new hire has been approved commencing January 2020 and comments of the Review Committee were addressed.

On the call for question, the motion

CARRIED

XX Regulations Governing the Degree of Master of Applied Ocean Technology and the Graduate Diploma in Applied Ocean Technology (Ocean Mapping)

www.mi.mun.ca
Vice-President (Marine Institute)
G. Blackwood

The degree of Master of Applied Ocean Technology (M.A.O.T.) is offered in Ocean Mapping (OM). There is also a Graduate Diploma in Applied Ocean Technology in the field of Ocean Mapping.

The programs will be administered by an Academic Director appointed by the Associate Vice-President Academic (Marine Institute), together with an Academic Advisory Committee.

The Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President Academic (Marine Institute). This Committee will consist of the Academic Director as Chair and five members of the academic community of the University. Normally, all appointments will be for a period of three (3) years.

A Technical Advisory Committee consisting of a cross-section of members with professional expertise related to ocean technologies, will provide regular feedback on program content, instruction, and future direction of the programs. Members of the Technical Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President Academic (Marine Institute). The Academic Director will be an

ex-officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

XX.1 Graduate Diploma in Applied Ocean Technology (Ocean Mapping)

The Graduate Diploma in Applied Ocean Technology (Ocean Mapping) is an applied and technical program offered by the School of Ocean Technology, at the Fisheries and Marine Institute. This program is for students who aim to pursue a career in ocean mapping, and includes specialized skills training that will empower students to conduct industry-ready tasks and applied research in any aspect of ocean mapping.

These regulations must be read in conjunction with the **General Regulations** of the School of Graduate Studies of Memorial University of Newfoundland

XX.1.1 Admission Requirements

To be considered for admission to the Graduate Diploma in Applied Ocean Technology (Ocean Mapping), an applicant must be eligible to register in the Master of Applied Ocean Technology program (see **Master of Applied Ocean Technology, Admission Requirements** below).

XX.1.2 Program of Study

The program is offered primarily on-campus and includes a field course component during which attendance at the Marine Institute Campus is required. Students will normally register on a full-time basis. The program can be completed on a part-time basis.

Students in the program are normally required to complete 15 credit hours of course work, specifically:

- Four (4) in-class courses: OTEC 6000, 6001, 6002, and 6003 from **Core Courses**; and
- One (1) field course: OTEC 6004 from **Core Courses**.

Students may be required to take additional courses.

Courses required for the Graduate Diploma in Applied Ocean Technology (Ocean Mapping) are listed in the **Courses** section under the Master of Applied Ocean Technology program.

XX.1.3 Evaluation

1. Students in the Graduate Diploma in Applied Ocean Technology (Ocean Mapping) must obtain a grade of B or better in all program courses.
2. Students who receive a grade of less than B in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

XX.2 Master of Applied Ocean Technology

The Degree of Master of Applied Ocean Technology (Ocean Mapping) is an applied and technical program offered by the School of Ocean Technology, at the Fisheries and Marine Institute. The Master of Applied Ocean Technology is offered, at present, in Ocean Mapping. This program is for students who aim to pursue a career in ocean mapping, and includes specialized skills training that will empower students to conduct industry-ready tasks and applied research in any aspect of ocean mapping.

These regulations must be read in conjunction with the **General Regulations** of the School of Graduate Studies of Memorial University of Newfoundland

XX.2.1 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 in the areas of science, technology, engineering or equivalent, both in achievement and depth of study, from an institution recognized by the Senate.
2. Any other applicant may be considered for admission provided that:
    a. The applicant has completed a second-class or equivalent undergraduate degree from an institution recognized by the Senate;
    b. The applicant demonstrates a satisfactory level of knowledge of math and science through undergraduate or graduate course work; and
    c. The applicant demonstrates in a statement of interest, a commitment and passion for ocean mapping and related technology through combined efforts of prior technical training in a relevant ocean technology field and employment or experience in field schools, research programs, the ocean technology industry, regulatory agencies or government departments, non-governmental organizations, consulting activities, or other relevant activities.

    Completion of additional course work in math, science, and/or related technology may be required for applicants applying under this clause.
3. 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.

XX.2.2 Program of Study

Students in the Master of Applied Ocean Technology program are required to complete 30 credit hours of course work through either the Project Route or the Course Route.

The program is offered primarily on-campus and includes a field course component during which attendance at the Marine Institute Campus is required. Students will normally register on a full-time basis. The program can be completed on a part-time basis.

1. **Project Route:**
   30 credit hours (24 credit hours of course work and a comprehensive project course (6 credit hours))
    - Eight (8) **Core Courses** (24 credit hours)
        - Seven (7) in-class courses: OTEC 6000, 6001, 6002, 6003, 6005, 6008 and 6010 from **Core Courses**; and
        - One (1) field course: OTEC 6004 from **Core Courses**
    - **Project Course** OTEC 6100 (6 credit hours)
    - Students may be required to take additional courses.

   OTEC 6100 is normally completed after all other program requirements have been met. In addition:
    1. The Academic Director/Program Chair will approve the student's Project Supervisor.
    2. Students will choose a topic/project in consultation with the Academic Director and Project Supervisor.
    3. The project report will be evaluated by two examiners.

2. **Course Route:**
   30 credit hours of course work
    - Eight (8) **Core Courses** (24 credit hours)
        - Seven (7) in-class courses: OTEC 6000, 6001, 6002, 6003, 6005, 6008 and 6010 from **Core Courses**; and
        - One (1) field course: OTEC 6004 from **Core Courses**
    - Two (2) **Electives** (6 credit hours)
    - Students may be required to take additional courses.

Courses required for the Master of Applied Ocean Technology (Ocean mapping) are listed in the **Courses** section.

XX.2.3 Transfer Credits

Up to three relevant elective courses (9 credit hours) may be transferred into the Master of Applied Ocean Technology 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.

XX.2.4 Evaluation

1. Students in the Master of Applied Ocean Technology program must obtain a grade of B or better in all program courses.
2. Students who receive a grade of less than B in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

XX.3 Courses

XX.3.1 Core Courses

- OTEC 6000: Ocean Mapping Essentials I
- OTEC 6001: Ocean Mapping Essentials II
- OTEC 6002: Applied Geodesy and Positioning
- OTEC 6003: Applied Hydrography
- OTEC 6004: Field Course in Ocean Mapping (PR: OTEC 6000, 6001, 6002, 6003)
- OTEC 6005: Applied Underwater Acoustics
- OTEC 6008: Applied Geostatistical Analysis and Seabed Characterization
- OTEC 6010: Marine Geology and Geophysics

XX.3.2 Electives

- OTEC 6007: Autonomous Vehicles for Ocean Mapping
- OTEC 6013: MetOcean Instrumentation and Observation
- OTEC 6014: Introduction to Marine Renewable Energy (MRE) (CR: MSTM 4055
- GEOG 6821: Advanced Computer Mapping
- MSTM 6001: Fisheries Ecology
- MSTM 6011: Introduction to Integrated Coastal and Ocean Management / Marine Spatial Planning
- MSTM 6015: Marine Protected Areas
- MSTM 6027: Coastal and Ocean Environmental Policies
- MSTM 6039: Sustainability and Environmental Responsibility
- OCSC 7100: Biological Oceanography

XX.3.3 Project Course

- OTEC 6100: Applied Ocean Technology Project in Ocean Mapping (6 credit hours)

Secondary Changes:

SGS General Regulation 3.2.1 Graduate Diplomas

- **Applied Ocean Technology**
  - Graduate Diploma in Applied Ocean Technology (Ocean Mapping)
- **Business Administration**
  - Graduate Diploma in Business Administration
- **Education**

- Diploma in Post-Secondary Studies (Health Professional Education)
- Graduate Diploma in Education (Educational Leadership Studies)

- **Engineering**
  - Graduate Diploma in Engineering
- **Fisheries and Marine**
  - Graduate Diploma in Marine Studies (Fisheries Resource Management)
- **Humanities and Social Sciences**
  - Graduate Diploma in Humanities and Social Sciences
- **Medicine**
  - Graduate Diploma in Medicine (Clinical Epidemiology)
  - Graduate Diploma in Medicine (Community Health)
- **Nursing**
  - Graduate Diploma in Nursing (Post Master's Nurse Practitioner)

vi. Education

Education is requesting approval of the proposed new program – Master of Education (Reading Development and Instruction. The Review Committee report, proponent response and proposal were circulated for information.

It was moved by Echo Pittman and seconded by Rhonda Joy that the proposed new program be approved. The motion

CARRIED

Master of Education (Reading Development and Instruction)

12.8.X

The Master of Education (Reading Development and Instruction) provides students with an opportunity for in-depth study of the nature of reading development, assessment and instruction for all students including diverse learners. This degree is suitable for candidates interested in pursuing roles requiring specialized knowledge about reading for guiding instructional planning and literacy leadership in educational settings.

12.8.X.x Admission Requirements

Students applying for admission to the Master of Education (Reading Development and Instruction) must meet the criteria for acceptance to a graduate program in the Faculty of Education. Students must have from a recognized institution, either (i) an undergraduate degree with at least second-class standing, or (ii) an undergraduate degree and an average of at least 70% in the last 90 attempted undergraduate credit hours. Preference will be given to applicants with completed courses related to assessment and the remedial instruction of struggling readers.

12.8.X.x Program Requirements

Students for the degree are required to complete the following five courses:

- Education 6100 Research Designs and Methods in Education
- Education 6470 Word and sentence-level reading development and instruction
- Education 6471 Text-level reading development and instruction (Prerequisite: E6470)
- Education 6472 Issues and interventions in reading development and instruction for diverse learners (Prerequisites: E6470, E6471)
- Education 6473 Praxis for reading specialists (Prerequisites: E6470, E6471, E6472)

1. Students on the *project route* will also complete the following courses:

    a. Nine credit hours to be taken from graduate course offerings in the area of language and Literacy Studies, Faculty of Education (excluding E6642) or other courses approved by the graduate office.

    b. Education 6192 Project in Reading Development and Instruction normally taken at the completion of the course work and is intended to facilitate the conceptualization and writing of a project under the direction of a supervisor. A project is a theoretically based product intended for possible use in educational settings. For this program, this project shall be reading-focused and developed in consultation with the project supervisor (6 credit hours).
    Note: students must complete at least 24 credit hours prior to registering for this project.

2. Students on the *thesis route* will also complete the following:

    a. One of the following research course as appropriate to the thesis methodology, chosen in consultation with the thesis supervisor:
        - 6466 Qualitative Research Methods
        - 6467 Quanitative Research Methods
        - 6468 Critical Approaches to Educational Research
        - 6469 Theoretical and Methodological Foundations of Action Research
        - 6909 Narrative Approaches to Teaching, Learning and Research

    b. The thesis shall be focused on an area of inquiry related to reading development and instruction and development in consultation with the thesis supervisor.

All courses completed must satisfy the requirements for the Master of Education (Reading Development and Instruction).

Secondary Revisions

Section 12.2

12.2 Program of Study

1. Students for the Master of Education (Educational Leadership Studies, Curriculum, Teaching and Learning Studies) shall be required to complete a minimum of:
    a. 18 credit hours plus a thesis; or
    b. 24 credit hours plus an internship report, a project report or a paper folio; or
    c. 30 credit hours on the comprehensive-course route.

    Students for the Master of Education (Post-Secondary Studies) shall be required to complete a minimum of:
    a. 18 credit hours plus a thesis; or
    b. 24 credit hours plus an internship; or
    c. 30 credit hours on the comprehensive-course route.

    Students for the Master of Education (Counselling Psychology) shall be required to complete a minimum of:
    a. 30 credit hours (which include an internship) plus a thesis; or
    b. 36 credit hours (which include an internship) on the comprehensive-course route.

    Students for the Master of Education (Information Technology) shall be required to complete a minimum of:
    a. 18 credit hours plus a thesis; or
    b. 30 credit hours on the comprehensive-course route.

    Students for the Master of Education (Reading Development and Instruction) shall be required to complete a minimum of:
    a. 24 credit hours plus a project report; or
    b. 18 credit hours plus a thesis

    Students for the Graduate Diploma in Post-Secondary Studies (Health Professional Education) must complete:
    c. 12 credit hours

    Students for the Graduate Diploma in Educational Leadership Studies must complete:
    d. 18 credit hours

Section 12.9

12.9 Courses

Course descriptions for graduate courses in Education are available at the Faculty of Education graduate website. A selection of the following graduate courses shall be offered to meet the requirements of students, as far as the resources of the Faculty allow.

- 6100 Research Designs and Methods in Education
- 6105 Social and Cultural Difference and Education
- 6106 Popular Culture and Literacy Education
- 6107 Arts Education: Creativity in the Classroom
- 6108 Literacy and Language Education: Sociocultural Perspectives
- 6192 Project in Reading Development and Instruction
- 6202 Social Context of Educational Leadership
- 6203 Leadership: Theory and Practice
- 6204 Educational Administration: Theory and Practice

- 6205 Educational Policy: Theory and Practice
- 6290 Research and Development Seminar in Educational Leadership Studies
- 6291 Internship in Educational Leadership Studies (6 credit hours)
- 6292 Project in Educational Leadership Studies (6 credit hours)
- 6293 Paper Folio in Educational Leadership Studies (6 credit hours)
- 6300 Teaching and Learning
- 6321 Supervisory Processes in Education
- 6330 Educational Finance
- 6335 Legal Foundations of Educational Administration
- 6390 Research and Development Seminar in Curriculum, Teaching and Learning Studies
- 6391 Internship in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6392 Project in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6393 Paper Folio in Curriculum, Teaching and Learning Studies (6 credit hours)
- 6394 Biographical Explorations of Teaching and Learning
- 6410 Seminar on Philosophical Issues in Educational Policy and Leadership
- 6420 Ethical Issues and Perspectives in Educational Practice and Policy
- 6425 Comparative Perspectives in Public Education, Reform, and Leadership
- 6426 Computer Applications in Educational Administration
- 6427 School Community Partnerships
- 6440 Family-School Relations: Leadership and Policy Implications
- 6461 Graduate Research Writing
- 6462 Cultural Landscapes, Knowledge and Pedagogy
- 6463 Relationships First: Rethinking Educational Engagement *(credit may be obtained for only one of 6463 or 6936)*
- 6465 School Violence: Leadership and Policy Implications
- 6466 Qualitative Research Methods
- 6467 Quantitative Research Methods
- 6468 Critical Approaches to Educational Research
- 6469 Theoretical and Methodological Foundations of Action Research
- 6470 Word and Sentence Level Reading Development and Instruction
- 6471 Text-level Reading Development and Instruction
- 6472 Issues and Interventions in Reading Development and Instruction for Diverse Learners
- 6473 Praxis for Reading Teachers
- 6502 Contexts of Music Education
- 6503 Teaching Music from the Podium
- 6504 Musicianship, Pedagogy, and Learning
- 6590 Research and Development Seminar in Information Technology in Education
- 6600 Learning and Motivation
- 6602 Curriculum Studies
- 6603 Place, Ecology and Education
- 6610 Research on Computers in the Curriculum
- 6615 Educational Software Prototyping and Evaluation
- 6620 Issues and Trends in Educational Computing
- 6630 Critical Issues in Mathematics Education
- 6632 Current Research in Teaching and Learning of Elementary School Mathematics *(prerequisite: 6630)*
- 6634 Teaching and Learning to Solve Mathematics Problems *(prerequisite: 6630)*
- 6635 Teaching and Learning Geometry
- 6636 Teaching and Learning the Concept of Number and Operations
- 6639 Technology and the Teaching and Learning of Mathematics *(prerequisite: 6630)*
- 6641 Writing in the Primary, Elementary and Secondary Schools
- 6642 Developmental Reading (K-8)
- 6643 Contemporary Issues in Intermediate and Secondary English
- 6644 Drama in Education

- 6645 Literature for Children and Adolescents
- 6646 Literature in the Secondary School
- 6647 Diagnosis and Remediation of Reading and Writing Difficulties
- 6649 Exploring Multiple Literacies
- 6653 Contemporary Issues in Science Education I
- 6655 The Nature of Science and Science Education
- 6658 Teaching and Learning Scientific Concepts, Laws, and Theories
- 6660 Information Technology
- 6661 Applications of Media in Education
- 6662 Research Seminar in Teacher-Librarianship
- 6663 The Organization of Learning Resources
- 6664 Seminar in School Improvement
- 6668 Current Issues in Second Language Education
- 6669 Graduate Seminar in Second Language Teaching and Learning
- 6670 Teaching and Learning Social Studies
- 6671 Research in Social Studies Education
- 6672 Issues and Trends in Social Studies
- 6673 Second Language Teaching, Learning and Curriculum *(credit may be obtained for only one of Education 6673, the former 6665 or 6667)*
- 6674 Research in Second Language Writing Education
- 6675 Current Issues in Rural Education
- 6676 Research and Practice in TESL/TEFL (Teaching English as a Second/Foreign Language)
- 6693 Literacy for the Young Child in Home and School
- 6700 Ethical and Legal Issues in Counselling
- 6701 Issues and Methodologies in Learning and Developmental Research
- 6702 Counselling: Theory and Practice
- 6705 Nature and Development of School Counselling Services
- 6706 Career Education and Career Counselling
- 6707 Assessment for Counsellors
- 6708 Group Counselling: Theory and Practice
- 6709 Assessment of Intelligence and Learning Skills
- 6710 Issues in Development and Implementation of Special Education Policy and Practices
- 6711 Behaviour Modification in the Educational Setting
- 6712 The Nature and Assessment of Behaviour Disorders in Children and Adolescents
- 6713 Educational Applications of Contemporary Cognitive Psychology
- 6714 Principles and Practices in Exceptionality
- 6715 The Theory and Practice of Peer Helping Programs
- 6716 Working with Families and Parents
- 6717 Counselling Adolescents
- 6718 Elementary School Counselling
- 6719 Cultural Issues in Counselling
- 6720 Internship in Counselling Psychology (9 credit hours)
- 6755 Nature and Assessment of Learning Disabilities
- 6801 Foundations of Post-Secondary Programs
- 6802 Adult Learning and Development
- 6803 Research in Post-Secondary Education
- 6804 Leadership and Human Resource Development in Post-Secondary Education
- 6805 Advanced Human Resource Communications
- 6806 Interprofessional Education in the Health Professions
- 6807 Economics and Finance of Post-Secondary Education
- 6822 Foundations of Instructional Design in Post-Secondary Education
- 6823 Principles of Program Design and Development
- 6831 Organization and Administration of Student Services for the Adult Learner

- 6832 Issues and Trends in the Administration of Post-Secondary Education
- 6841 Student Development Theory, Services and Programs in Post-Secondary Education
- 6890 Research and Development Seminar in 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, 6938, and 6940)
- 6913 Putting Action Research Methodologies into Practice *(prerequisite: 6469 Theoretical and Methodological Foundations of Action Research)*
- 6923 Perspectives in Indigenous Education
- 6924 Decolonizing Pedagogies
- 6927 Digital Game-based Learning
- 6931 Educational Technology Law
- 6932 Intellectual Technology Law in Teaching and Learning
- 6938 Advanced Individual Counselling: Theory and Practice (*prerequisite 6702 and 6708*)
- 6940 Administration of Student Services in Post-Secondary Education

7. ANY OTHER BUSINESS

a. Pass With Distinction

Following a call for feedback/input from units regarding the consideration of removing Pass with Distinction for PhD comprehensive examinations and oral defence of theses, a majority of the feedback received were in favour of removing this category with a suggestion to come up with recognizing excellent theses in other ways. It was noted that in Canada, the Canadian Associate of Graduate Studies offers the distinguished dissertation awards. Internal competitions could be held in each unit for outstanding dissertation, and making it a bigger event for an outstanding dissertation award with a selection committee to choose winner from unit entries. At this point we would welcome any suggestions that units may wish to make.

Over the past five years there have been 445 PhDs awarded, of which 114 were Pass with Distinction (26%). It varied amongst units (61% to 10%).

Some comments received were:

- Agree with its removal /arbitrary label / no rubric / lack of definition /more to do with who's in the room rather than the student's work
- Disagrees with removal – should recognize and celebrate higher than average academic achievement / it sticks to the person throughout their career

SGS will await further comments and will formulate a motion.

b. SGS Diversity Ad hoc Committee

In Winter 2019 SGS appointed an Ad hoc Committee on Diversity, comprised of faculty, staff and students. Several discussions have been had and this group is

working on a number of initiatives. One such initiative is the Lunch and Learn Series: School of Graduate Studies Diversity Dialogue Series. The first session was October 2, 'What Do We Mean When We Say EDI?"; the second session was November 13, universal design in all areas of graduate studies. The third is now scheduled for January 8, 2020, with information to follow. There seems to be an appetite for these discussions.

SGS and The Provost Office covered expenses to send two members from this Committee to a conference on racism later this month. The attendees will do a presentation to the Deans after their return.

SGS is partnering with University of Toronto and Concordia University for a Connection Grant Application which will be put forward for a National Research Network for black graduate students.

SGS is working on a special advisor to Aimée Surprenant and it is anticipated that will be soon approved for a one-year appointment.

SGS will be recommending to Academic Council, for inclusion in its By-Laws, that the SGS Diversity Committee will be a Standing Committee of Council.

8. NOTICE OF MOTION
9. ADJOURNMENT

The meeting adjourned at 4:40 p.m.

_____ _____

Aimée Surprenant, Chair Echo Pittman, Secretary