MEETING OF THE FACULTY COUNCIL OF THE FACULTY OF SCIENCE

A regular meeting of the Faculty Council of the Faculty of Science will be held on Wednesday, November 19, 2014, at 1 p.m. in C-3033 (please note change in room for this meeting).

AGENDA

1. Regrets

2. Adoption of the Minutes of October 15, 2014

3. Business Arising from the Minutes

4. Correspondence:
   a. Feedback requested, General Academic Regulations 6.6 EVALUATION and 6.7 EXAMINATIONS
   b. Consultation on New Travel Outside of Canada Policy
   c. Date for Submission of Calendar Changes - 2015-2016

5. Reports of Standing Committees:
   A. Undergraduate Studies Committees: None
   B. Graduate Studies Committee:
      c. Department of Chemistry, special topics course, CHEM 6296, Metal-mediated Reactions and Catalysis, paper 5.B.c (7 pages).
   C. Nominating Committee: None
   D. Library Committee: None

6. Reports of Delegates from Other Councils

7. Report of the Dean

8. Question Period

9. Adjournment

Mark Abrahams
Dean of Science
FACULTY OF SCIENCE
FACULTY COUNCIL OF SCIENCE
MINUTES OF MEETING OF OCTOBER 15, 2014

A meeting of the Faculty Council of the Faculty of Science was held on Wednesday, October 15, 2014, at 1:00 p.m. in room C-2045.

FSC 2280

Present
Biology
Innes, D.J.

Chemistry
Bottaro, C. Fridgen, T. Pickup, P.

Computer Science
Brown, E.

Mathematics & Statistics
Loredo-Osti, J.C. Sullivan, S.

Ocean Sciences
Fletcher, G.

Physics & Physical Oceanography
Morrow, M.

Psychology
Martin, G.

Dean of Science Office
Abrahams, M. Foss, K. Rideout, J. Surprenant, A.
Zedel, L.

Geography
Catto, N. Edinger, E.

Library
Alcock, E.

Education
Penney, S.
Registrar’s Office
Burry, J.

School of Music
Cook, N.

Undergraduate Students
Doyle, K. Southall, T.

FSC 2281 Regrets
Sukhinder Cheema Wolfgang Banzhaf Leah Robertson

FSC 2282 Adoption of Minutes
Moved: Minutes of the September 17, 2014, meeting be adopted as amended (Sullivan/Bartaro). Carried.

FSC 2283 Business Arising: None

FSC 2284 Correspondence:
a. Call for consultations, Firearms on Campus regulation review. A committee has been established to review the change in policy that has already been approved by Senate. Faculty members are asked to provide feedback to Brian Hammond, Office of the Registrar at bhammond@mun.ca.

FSC 2285 Reports of Standing Committees:
A. Undergraduate Studies Committee
Report was presented by Shannon Sullivan, Chair, Faculty of Science Undergraduate Studies Committee.

a. Department of Chemistry, revisions to Computation Chemistry major and honours major programs. This item was not motioned and will be tabled until a future meeting of Faculty Council.
b. Moved: Department of Ocean Sciences, new minor program in Oceanography (Sullivan/Fletcher). Carried. One abstention.

B. Graduate Studies Committee: None

C. Nominating Committee:
Report presented by Aimée Surprenant, Associate Dean (Undergraduate and Administration)
a. Moved: Approval of committee matrix with amendment to add Annie Mercier as a representative from the Faculty of Science to the School of Graduate Studies Faculty Council, and Patrick Gagnon as a representative from the Department of Ocean
Sciences to the Faculty of Science Library Committee (Surprenant/Loredo-Osti). Carried. Moved: Authorization for nominating committee to add further names to the committee matrix to complete representation (Surprenant/Fletcher). Carried. Dr. Surprenant was asked to list the representatives still being sought.

D. Library Committee: None

FSC 2286 Reports of Delegates from Other Councils: None

FSC 2287 Report of the Dean
Presented by Mark Abrahams, Dean.

Members of Council were reminded that this week is Fall convocation week. For those able to attend, the convocation of B.Sc. and B.Sc. (Honours) degrees will take place on Friday, October 17, at 3:00 pm in the Arts and Culture Centre. Extra tickets are available, and faculty are encouraged to attend and take the time to acknowledge the accomplishments of their students.

As some might know, our Vice-President (Research), Dr. Richard Marceau, is away on medical leave. We are hoping that he will return to work early in the new year; but in the interim, Dr. Ray Gosine will serve as the Acting Vice-President (Research) and Dr. Carrie Dyck will be the Acting Associate Vice-President (Research).

There has been considerable attention paid to policy regarding Canada Research Chairs and particularly a new policy regarding the Financial Arrangements of Canada Research Chairs. Given Dr. Marceau’s absence and the fact that the Dean’s and Dr. Marceau’s positions diverge significantly on certain aspects of the policy, the Dean has been asked to draft a revised policy which he intends to complete this week.

Dr. Marceau is anxious to implement his Strategic Research Intensity Document. One of the key issues is the goal to double our research productivity. To accomplish this, he is seeking a mechanism to track research productivity in order to assess whether new policies will have any impact upon this metric. The Vice-President’s (Research) office is working on that measure; so when asked, the Dean will request that you please provide detailed information on your research output for the 2012 calendar year. They are also seeking suggestions for appropriate referencing tools so they can measure research productivity without requiring input from all faculty.
Question Period

Several questions were raised regarding the Strategic Research Intensity Document. A specific question was whether publications and other forms of communication should be combined when reporting on research intensity. The Dean felt this would cause a loss of diversity. There was also concern about the time commitment required to double research productivity and the fact that faculty members are already working at capacity. The Dean commented that some of the increased productivity should come from an increase in the number of graduate students and their subsequent publications, although space availability for these students is a factor that has not yet been discussed. The Associate Dean (Graduate & Research) and the Dean mentioned that the Vice-President’s (Research) office is aware that some units are more research intensive than others and the Faculty of Science probably won’t be expected to double in research intensity since we are already a leader in this area.

Adjournment

The meeting adjourned at 1:22 p.m.
3 November 2014

TO:         Secretaries, Academic Councils, Faculties/Schools/Grenfell Campus/Marine Institute
            Student Unions (St. John’s Campus, Grenfell Campus, Marine Institute)
            DELTS, Division of Co-operative Education, University Counselling Centre

FROM:       Jennifer Porter, Secretary, Senate Committee on Undergraduate Studies

SUBJECT:    General Academic Regulations 6.6 EVALUATION and 6.7 EXAMINATIONS

At a meeting held in June 2013, the Senate Committee on Undergraduate Studies recognized the need to not only ensure that the spirit of General Academic Regulation 6.6.6 CORRECTION AND RETURN OF STUDENT WORK is being adhered to, but also to review General Academic Regulations 6.6 EVALUATION and 6.7 EXAMINATIONS in their entirety. As such, a Sub-Committee was established to review this matter and the proposed revisions to the regulations were endorsed by the Senate Committee on Undergraduate Studies in October 2013. The revisions were subsequently forwarded to the university community for consideration and feedback.

Taking into consideration the responses received from the university community, the Sub-Committee continued to review this matter and recently submitted its revised proposed amendments to General Academic Regulations 6.6 EVALUATION and 6.7 EXAMINATIONS to the Senate Committee on Undergraduate Studies. The proposed amendments have been endorsed by the Committee and are once again being forwarded to the university community for consideration and feedback. It is important that these proposed amendments be forwarded to all faculty for consideration.

Since the Senate Committee on Undergraduate Studies would like to deal with this matter as expeditiously as possible, I am requesting that you respond at your earliest possible convenience.

Thank you for your timely assistance in this very important matter; input from the academic community is essential in completing these revisions.

If you have any questions or require clarification regarding the above, please get in touch with me by phone at 864-4410 or by e-mail at importer@mun.ca.

Yours truly,

Jennifer Porter
Deputy Registrar and Secretary to the Committee
JP/imm

Attachment

cc: Committees on Undergraduate Studies
    Deans/Vice-Presidents
    Deputy Provost (Students) and Associate Vice-President (Academic)
    Undergraduate Studies
Report of the *ad hoc* Subcommittee on Regulations 6.6 and 6.7

Committee Members

Sean Kennedy, MUNSU
Sharon Nofall-Bennett, Grenfell Campus Registrar
Jennifer Porter, Deputy Registrar
Linda Rohr, School of Human Kinetics and Recreation
Shannon Patrick Sullivan, Faculty of Science (*chair*)

Former Members:
Matthew Janes, Division of Arts, Grenfell Campus (*past chair*)
Ashley Wilson, MUNSU
Introduction

During the Winter 2013 semester, the Senate Committee on Undergraduate Studies (SCUgS) created an ad hoc subcommittee which was tasked with examining the Undergraduate Regulations concerning Evaluation and Examination. (Until the 2013-2014 edition of the University Calendar, these were Regulations 5.6 and 5.7; they have since been renumbered as Regulations 6.6 and 6.7.) Various potential issues with these regulations had recently been observed, either through communication with members of the faculty or the Office of the Registrar, or during consideration of items on the SCUgS agenda.

The Subcommitte began meeting during the Spring 2013 semester, and prepared a preliminary report for Fall 2013. The work during this period concentrated on the specific concerns which had led to the Subcommittee's creation. A set of Calendar charges stemming from this report was disseminated broadly within the University community, and numerous comments were subsequently collected. These consultations not only provided the Subcommittee with input on the specific changes suggested in this preliminary report, but also afforded academic units the opportunity to raise other concerns, and make further suggestions, with regard to these regulations.

The Subcommittee resumed meeting during Spring 2014. By this point, it had become clear that Regulations 6.6 and 6.7 would benefit from a substantial overhaul. In addition to the various matters which had been brought to the Subcommittee's attention, it was now apparent that these regulations suffered from inconsistencies of style and terminology—the natural result, no doubt, of Calendar language which had been amended piecemeal-fasion over the course of many years. As such, the present document offers a much wider-ranging set of amendments to the Calendar than were contained in the preliminary report of Fall 2013.

In order to make these recommendations more easily digestible, the Rationale which follows this introduction will examine each of the "revised" regulations, explain its relationship to the "existing" regulations (and, where appropriate, to the proposals of the Fall 2013 preliminary report), and elaborate on the reasons for the resulting changes. Elsewhere in this report, two appendices offer both a Clean Version of the proposed revised Regulations 6.6 and 6.7, as well as a Track-Change Version.
Rationale

Each of the following subsections refers to the “new” numbering of the regulations arising from the proposed revisions.

4 Glossary of Terms Used in This Calendar

We propose two new terms to be added to the Calendar glossary, defining “In-Class Work” and “Take-Home Work”. Doing so ameliorates two issues: first, it improves the readability of some of the regulations by cutting down on excessive wordiness; and second, it eliminates the potential for confusion or ambiguity arising from expressions which are, to an extent, colloquial. For instance, these definitions make it clear that “In-Class Work” also includes exercises completed in the laboratory or in a designated examination venue for distance courses, as opposed to referring solely to work completed in the lecture classroom. This terminology is employed most prominently in Regulations 6.6.2.2 and 6.6.5.

6.4 Registration

6.4.8 Completing a Course

This is currently Regulation 6.6.5, but we felt that it would more appropriately appear under the same regulation which includes sections on “Adding Courses” and “Dropping Courses”, amongst others. The current Regulation 6.4.8 (“Auditing of Courses”) would therefore be renumbered as Regulation 6.4.9. Apart from changing its position in the Calendar, the only other change we propose to make to the existing Regulation 6.6.5 is to remove an errant comma after “laboratory projects”.

6.6 Evaluation of Student Work

We propose renaming this section (from simply “Evaluation”) in order to achieve greater clarity.

6.6.1 Method of Evaluation

No changes are suggested for Regulation 6.6.1.

6.6.2 Course Syllabus

The title of this section has been altered to more clearly reflect its contents, especially in light of the proposed amendments listed below.

6.6.2.1: We propose to better define the concept of the “course syllabus” and enhance the list of information which it should contain. The existing Regulation 6.6.2.1 requires only the method of evaluation and the list of prerequisites and co-requisites. We propose that the course syllabus should also indicate the textbook(s) and any other materials which students are required to purchase, as well as the instructor’s office hours. Furthermore, given the rise in allegations of academic misconduct which SCUgS has observed in recent years, we propose that each course syllabus should tailor a statement about academic misconduct to the appropriate needs of the course, and direct students to Section 5.11 of the Calendar.
(Individual academic units may, of course, wish to enumerate additional information which should be included on the course syllabus.)

6.6.2.2: The proposed new Regulation 6.6.2.2 is an amended version of the current Regulation 6.6.2.3. Because it defines the "method of evaluation", a term introduced in Regulation 6.6.2.1, we felt that it was better positioned as its immediate sequel.

The first bullet is unchanged from the current Regulation 6.6.2.3.

The second bullet merges and amends the second and third bullets of the current Regulation 6.6.2.3. During the Subcommittee's early work, concern had been raised about the inconsistency of these two bullets—which require the inclusion of "the approximate date" for in-class work, but "the date" for take-home work. It was also observed that the word "approximate" had no clear meaning. In our original proposal of Fall 2013, it was suggested that the word "approximate" be deleted from the second bullet, such that the course syllabus would include the precise dates of all parts of the evaluation. However, the subsequent consultation demonstrated that this was an unpopular amendment, with several academic units describing situations which would make it impractical to offer this degree of specificity at the start of the semester. Furthermore, research into earlier editions of the Calendar raised the likelihood that the omission of the word "approximate" from the third bullet was accidental. We now suggest that "the probable dates" for all work be included in the course syllabus; the new Regulation 6.6.3.1 expands on the meaning of "probable" in this context. The Subcommittee hopes that this will strike an appropriate balance between offering flexibility for instructors, while ensuring that students have suitable notice of their schedule of work for the semester and can plan accordingly. We recognise that some instructors may, for legitimate academic reasons, require greater flexibility still; in such cases, we encourage instructors to make use of the regulation regarding "Changing the Method of Evaluation" (the new Regulation 6.6.4).

The fourth bullet of the current Regulation 6.6.2.3, which required indicating "whether deferred tests or mid-term examinations or extensions of deadlines for out-of-class work are permitted" has been deleted. We felt that it was both confusing (because it did not make an explicit connection with the regulation which describes applying for an alternate evaluation, now numbered as Regulation 6.6.5) and unnecessarily restrictive, because other forms of accommodation might also be appropriate (such as changing the weight of parts of the evaluation). We feel that the new Regulation 6.6.5 is sufficient.

6.6.2.3: This is a revised version of the current Regulation 6.6.2.2. It introduces the possibility of electronic dissemination of the course syllabus in any course (as opposed to Web courses only). To ensure that students have easy access to an electronically-distributed syllabus, we suggest limiting its distribution to the students' MUN e-mail address or Desire2Learn. (The language used here is intended to guard against future changes in these platforms.) The requirement that the course syllabus be in "typewritten or computer-generated format" was felt to be archaic, and has been omitted.

6.6.2.4: This is a new regulation. We felt that it was important for there to be easy access to course syllabi in the event of student appeals, re-reads, and similar requests, especially
since such requests often come after the end of the semester, when the relevant faculty member may not be available (or, in the case of sessional instructors, may no longer be under contract). Some respondents to the Fall 2013 proposal questioned the requirement that the course syllabus be submitted by the end of the first week of the semester. However, we felt that a timely submission would ensure that the course syllabus would be available to the University whenever it was needed, and that this would be consistent with the timeline for distributing the course syllabus to students.

6.6.2.5: This regulation is unchanged.

6.6.3 Scheduling of Parts of the Evaluation

This regulation is a heavily-amended version of the current Regulation 6.7.1. It has been situated as part of Regulation 6.6 so that Regulation 6.7 can be devoted exclusively to regulations governing final examinations.

6.6.3.1: This is a new regulation, which seeks to clarify the term "probable dates" used in Regulation 6.6.2, third bullet. Please see the rationale for the amendment to that regulation for more information.

6.6.3.2: This corresponds to the current Regulation 6.7.1.1. Only minor changes have been suggested: replacing the word "term" in the fourth sentence with "semester or session" (for consistency), and replacing the word "sessions" in the final sentence with "meetings" (to avoid confusion with the use of session to mean a seven-week semester).

6.6.3.3: This corresponds to the current Regulation 6.7.1.2. The same changes indicated above for Regulation 6.6.3.2 have also been proposed here. In addition, the regulation now makes reference to "in-class work" rather than "examinations". This both clarifies that the regulation has no effect on take-home work, while ensuring that it applies to other forms of in-class evaluation in addition to examinations.

6.6.3.4: This corresponds to the current Regulation 6.7.1.3, but it has been substantially amended in an effort to achieve greater clarity. The present revision is similar to that proposed in Fall 2013, but the list of exemptions has been expanded to include oral presentations, laboratory reports, and grading on participation.

6.6.3.5: This corresponds to the current Regulation 6.7.1.4. Rather than referring solely to examinations, it has been amended to clarify that no form of evaluation may be held or due after the last day of lectures and before the first day of final exams. Based on the feedback received by the Subcommittee, we felt it was important to safeguard the so-called "study break" as a time during which students could not be obliged to complete any form of evaluation.

6.6.3.6: This is a new regulation, which is intended to provide clarity as to the administration of work due after the last day of the lecturing period. Evidence suggests that such pieces of evaluation are being used more commonly across the University, but except for the interdiction against their being due
between the end of classes and the start of exams (as given in the current Regulation 6.7.1.4, herein renumbered as Regulation 6.6.3.5) they are otherwise unregulated. Since students who have work due after the end of the lecturing period may face wildly differing exam schedules (and since, unlike final exams, it can often be difficult to prepare in advance for take-home work, especially if it is assigned on or near the last day of classes) it was felt that it would be most appropriate to regularise all such work as being due at the end of the exam period (recognising, of course, that some students might opt to submit the work earlier).

6.6.3.7: This corresponds to the current Regulation 6.7.1.5. It now makes more general reference to "in-class work" rather than specifically citing "examinations and tests". Otherwise, the only change is to hyphenate "third-last" and "second-last" where they appear.

6.6.4 Changing the Method of Evaluation
This is the existing Regulation 6.6.3. The only changes are to delete the superfluous phrase "explanation of the" in relation to the method of evaluation, and to replace the reference to "faculty member" with "course instructor" for the sake of clarity.

6.6.5 Exemptions from Parts of the Evaluation
This is an amended version of the current Regulation 6.6.2.4. It has been modified to include exemplars of possible accommodations, and to otherwise clarify language. In addition, while we felt that setting out a formal appeals process for this regulation was unnecessary, we have provided direction to students to speak with the head of the appropriate academic unit in the event that they wish to dispute their accommodation. Finally, please note that we acknowledge that the reference to a student being required to provide supporting documents may require amendment in the future, as a separate subcommittee is studying the issue of medical documentation. However, rather than preempt the work of that subcommittee, herein we are assuming that the status quo, as described in the current Calendar, will remain in effect. This also applies to Regulation 6.7.2 (below).

6.6.6 Correction and Return of Student Work
6.6.6.1: This regulation invited considerable feedback from the University community. However, there was little consensus to be found in the comments received, and the Subcommittee ultimately concluded that it is still too early to properly assess the effectiveness and suitability of this regulation, given that it was only introduced for the 2012-2013 academic year. Nonetheless, we felt that it was appropriate to explicitly define the manner in which an exemption from this regulation could be sought. Furthermore, while it is important for all students to receive timely feedback on their performance early in the semester, we felt that this is particularly vital in lower-level courses. As such, we have suggested that waivers for 1000- and 2000-level courses continue to be granted by the Senate Committee on Undergraduate Studies, while those for higher-level courses be considered by the appropriate faculty or school committee. (An exception is the Faculty of Engineering and Applied Science, which utilises a course numbering scheme in which 3000- and 4000-level play the same role as 2000-level courses elsewhere in the University. For consistency, we felt that Engineering courses at these levels should follow the same route as 1000- and 2000-level courses.)
6.6.6.2: This regulation deals with the timeliness of the return of student work prior to the final exam period. However, we felt that the absence of a more general statement about timeliness was inappropriate, and so we have included a new first sentence to ameliorate this. The regulation is otherwise unchanged, except for a rearrangement of the text to improve clarity.

Deleted Regulations

Two regulations have been deleted from Regulation 6.6. As previously noted, the current Regulation 6.6.5 ("Completing a Course") has been renumbered as Regulation 6.4.8. Furthermore, the current Regulation 6.6.4 ("Good Writing Skills") has been omitted; we felt that it was made redundant by the existing (and more extensive) Regulation 6.8.3 ("Good Writing”), to which it already referred.

6.7 Final Examinations

With the renumbering of the current Regulation 6.7.1 as Regulation 6.6.3, the remaining parts of Regulation 6.7 now refer exclusively to final examinations. As such, we propose renaming this section (from simply "Examinations").

6.7.1 Scheduling of Final Examinations

6.7.1.1: This is the existing Regulation 6.7.2.1. The only change is to indicate that final examinations may also be held at the end of a session (rather than just a semester).

6.7.1.2: This is the existing Regulation 6.7.2.2. The only change is to add two commas to improve the readability of the second sentence. The title of Regulation 6.7.2 has been amended to reflect its proposed revision (see below).

6.7.1.3: This corresponds to the Regulation 6.7.2.3. The final requirement (that students be informed "prior to the end of the registration period") has been removed: given that the method of evaluation must be communicated to students by the end of the first week of lectures, it is redundant.

6.7.1.4: This is the existing Regulation 6.7.2.4. The text now refers to both semesters and sessions.

6.7.2 Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations

The title of this regulation has been amended slightly to specify "deferred final examinations" (as opposed to "deferred examinations"). This is intended to avoid confusion with the proposed Regulation 6.6.5.

6.7.2.1: This is the existing Regulation 6.7.3.1. The only change is to regularise the wording of the first sentence relative to Regulation 6.7.2.4 (below).

6.7.2.2: This is the existing Regulation 6.7.3.2. No changes are being proposed.

6.7.2.3: This is the existing Regulation 6.7.3.3. The only change is to delete the non-standard inclusion of the adjective "academic" preceding "semester or session".
6.7.2.4: This is the existing Regulation 6.7.3.4. The only change proposed is to clarify the recipient of the appeal for a deferred, deferred exam.

6.7.2.5: This regulation is new, although it describes a long-standing University practice. Because the circumstance of having three final exams in a 24-hour period is one of the most common reasons students will apply for a deferred exam, it was felt that it would be appropriate to ensconce this policy in the Calendar proper.

6.7.3 Access to Final Examination Scripts
6.7.3.1: This is the existing Regulation 6.7.4.1. No changes are being proposed.

6.7.3.2: This is the existing Regulation 6.7.4.2. The only change is the amendment of the first bullet to refer to both semesters and sessions.

6.7.3.3: This regulation is new. It reflects the policy promulgated by the Office of the Registrar, and resolves the existing lack of clarity as to the disposition of final exam scripts.

6.7.4 Rereading of Final Examination Scripts
6.7.4.1: This is the existing Regulation 6.7.5.1. No changes are being proposed.

6.7.4.2: This regulation is new. It is intended to address the concern that students often apply for exam rereads without viewing their final exam script, and therefore without a clear sense of whether there may have been an error or impropriety in grading.

6.7.4.3: This is the existing Regulation 6.7.5.2. The only amendment is the regularisation of the spelling of "re-read" to "reread" in the final sentence.

6.7.4.4: This is an amended version of the current Regulation 6.7.5.3. Concern was raised that the refunding of the reread fee in the event of any increase in grade was not in keeping with the intent of the reread—namely to address gross errors or unfair marking practices—and was contributing to a tendency in at least some academic units for students to effectively treat the reread as a lottery. Not only did this result in a substantial extra workload in some units, but several accounts were also cited of detrimental effects on students’ grades. We propose that a refund should be granted only when the student’s final grade increases by at least 5%, or when the student’s final letter grade increases. We feel that these are appropriate benchmarks to delineate a significant improvement in the student’s mark which would reflect a genuine error in the original grading of the exam.
Full Text of Proposed Regulations 6.6 and 6.7
(Clean Version)
4 Glossary of Terms Used in This Calendar

In-Class Work
Is any part of the evaluation in a course which is to be completed by the student in a supervised setting, at a time and location designated by the University.

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

6.4 Registration

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

6.6 Evaluation of Student Work

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

6.6.2 Course Syllabus
1. Before the end of the first week of lectures in any semester or session, the course syllabus shall be made known to students. The course syllabus shall include:
   - the method of evaluation,
   - any required prerequisites or co-requisites,
   - any required textbooks or other resources which must be purchased,
   - the instructor's office hours, and
   - a statement regarding academic misconduct, including a reference to the entry on Academic Misconduct in this Calendar.
2. The following shall be included in the explanation of the method of evaluation:
   - the allocation of marks for all parts of the evaluation, e.g., assignments, laboratory projects, presentations, tests, mid-term examinations, final examinations;
   - with the exception of the final examination, the probable dates of all in-class parts of the evaluation, and the probable dates on which all take-home parts of the evaluation are due.
3. The course syllabus shall be provided in paper form to students present in class, or in electronic form via a University-approved email account or learning management system.

4. As early as possible following the start of lectures in each semester or session, and no later than the end of the first week of lectures, the course instructor shall file a copy of the course syllabus with the appropriate academic unit.

5. Methods used for notification of grades earned in all parts of the evaluation and for the return of graded evaluative instruments will be in keeping with the Access to Information and Protection of Privacy Act.

6.6.3 Scheduling of Parts of the Evaluation

1. Every effort should be made to adhere exactly to the dates given on the course syllabus. Deviations from these dates of one calendar week or less are subject to the restrictions listed in clauses 2 to 5. Longer deviations are permitted only as described under Changing the Method of Evaluation.

2. No laboratory examinations totalling more than one laboratory period in length shall be given in any laboratory course in any week during a lecturing period in any semester or session. Such examinations shall be administered in the laboratory time period assigned for that course section. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for laboratory examinations in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such laboratory examinations do not conflict with regularly scheduled meetings of another course for any student involved.

3. Any other in-class work shall not extend beyond the class period assigned to that course section in any week during a lecturing period in any semester or session. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for in-class work in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such in-class work does not conflict with regularly scheduled meetings of another course for any student involved.

4. No form of evaluation shall take place or be due during the last two weeks of the lecturing period in any semester or the last week of the lecturing period in any session, with the exception of oral exams and presentations, laboratory exams and reports, grading on participation, and take-home work which has been made available to students prior to this part of the lecturing period. Courses taught outside the regular time-frame are exempt from the application of this regulation. In exceptional circumstances, the undergraduate studies committee of the appropriate faculty or school may, upon the recommendation of the head of an academic unit, grant a waiver of this regulation with the proviso that the total value of all parts of the evaluation thereby permitted shall not exceed 20% of the final mark in that course. At the end of each semester, the Senate Committee on Undergraduate Studies must be notified of waivers granted.

5. No evaluation of any nature shall be held or due between the last day of lectures and the start of the formal examination period in any semester or session. The application of this clause to the Faculty of Education (with respect to accelerated courses), the Faculty of Medicine, the School of
Human Kinetics and Recreation (with respect to accelerated courses and courses offered outside the normal time frame during the Spring semester) and the School of Nursing is subject to interpretation by the appropriate committee on undergraduate studies.

6. Take-home evaluation which is to be submitted during the formal examination period in any semester or session shall be assigned no later than the last day of classes, and the due date shall be the end of the formal examination period.

7. In the event of an officially declared emergency which results in the cancellation or interruption of in-class work previously scheduled and notified to be held in the final class period of the third-last week of lectures of a semester or the second-last week of lectures of a session, teaching units may reschedule such work in the next regularly scheduled class or as early as possible in the second-last week of lectures of a semester or the last week of lectures of a session. In no circumstances can the rescheduled work be held in the last week of lectures of a semester.

6.6.4 Changing the Method of Evaluation

1. The method of evaluation, as made available to the class in the first week of lectures, shall be changed only if:
   - exceptional circumstances warrant the change; and
   - the head of the academic unit approves the proposed change; and
   - accommodation is made for students who demonstrate to the course instructor that they are disadvantaged by the change.

6.6.5 Exemptions from Parts of the Evaluation

1. A student who is prevented from completing a part of the evaluation by illness or bereavement or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, for an alternate evaluation. This alternate evaluation may consist of the deferral of in-class work, the extension of the deadline for take-home work, an alternative allocation of marks, or another appropriate accommodation. The application must normally be made to the course instructor within one week of the original date in the case of an in-class part of the evaluation, or within one week of the original deadline in the case of a take-home part of the evaluation. A student who is dissatisfied with the accommodation offered by the course instructor may consult with the head of the appropriate academic unit.

6.6.6 Correction and Return of Student Work

1. Provided that students submit work by the due date outlined in the method of evaluation, instructors shall mark and return work that is worth a total of at least 20% of the final grade before the last day to drop courses without academic prejudice. This excludes practicums, placements, internships, theses, and courses where a single piece of work is used to determine the entire mark for the course. In exceptional circumstances, a waiver of this clause may be granted to an individual section of a course in a given semester upon application by the course instructor. For courses at the 1000- and 2000-level (and at the 3000- and 4000-level in the case of the Faculty of Engineering and Applied Science), such a waiver may be granted by the Senate Committee on Undergraduate Studies. For all other courses, such a waiver may be granted by the undergraduate studies
committee of the appropriate faculty or school; at the end of each semester, the Senate Committee on Undergraduate Studies shall be notified of waivers granted.

2. Instructors shall mark and return all work in a timely manner. In courses where evaluation includes a final examination, instructors shall make all reasonable efforts to mark and return all work before the beginning of the examination period, provided that students submit this work by the due date specified in the method of evaluation.

6.7 Final Examinations

6.7.1 Scheduling of Final Examinations

1. Final examinations, if any, whether of the normal two-hour duration or longer, shall be held in each course at the end of the semester or session during which it was given in accordance with the schedule of examinations published by the Office of the Registrar. The application of this clause to the Bachelor of Education (Intermediate/Secondary) and all degree programs offered by the School of Human Kinetics and Recreation is subject to interpretation by the appropriate committee on undergraduate studies.

2. Normally, course sections offered during the day will have their final examinations, if any, scheduled in the day, and course sections offered in the evening will have their final examinations, if any, scheduled in the evening. When a student is unable, for good reason, to write a final examination scheduled outside the provisions of this clause, the student will be entitled to write a deferred examination. For further information refer to Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations.

3. When an academic unit determines that there will be a common final examination for day and evening sections of a course, students must be so informed in the explanation of the method of evaluation for the course.

4. Where possible, academic units should inform the Office of the Registrar when they submit their class schedules if it is anticipated that a common final examination will be required for day and evening sections of a course, so that this information can be publicized in the class schedule for the appropriate semester or session. Academic units should indicate whether the examination is to be held during the day or the evening.

6.7.2 Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations

1. A student who is prevented from writing a final examination by illness, bereavement or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, to have the course graded or have the final examination deferred. This application must be made within one week of the original date of the examination to the head of the appropriate academic unit.

2. The decision regarding the request of the student to have a course graded or have the final examination deferred, including information on the appeals route open to the student in the case of a negative decision, must be communicated in writing to the student and to the Registrar within one week of the receipt of the student's complete application. For further information refer to Appeal of Decisions.
3. In those cases where the academic unit accepts the extenuating circumstances the student may be permitted to write a deferred examination or, with the consent of both the academic unit and the student, the grade submitted may be based on term work alone. An interim grade of ABS will be assigned by the academic unit in the case of a student granted a deferred examination. This grade will be replaced by the final grade which must be received by the Registrar within one week following the start of classes in the next semester or session.

4. A student who is prevented from writing a deferred examination by illness, bereavement, or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, to have the deferred examination further deferred. This application must be submitted within one week of the scheduled date of the deferred examination to the head of the appropriate academic unit. The examination will be postponed to a time not later than the last date for examinations in the semester following that in which the student was enrolled in the course.

5. A student who is scheduled to write three final examinations which begin and end within a twenty-four-hour period may request to write a deferred examination. Normally, only the second examination in the twenty-four-hour period may be deferred. The application to defer this examination should be submitted as soon as possible after the release of the final examination schedule, and in any case no later than two weeks before the end of the semester or session.

6.7.3 Access to Final Examination Scripts

1. A student has a right to see his or her final examination script. However, the script is the property of the University and the University retains full possession and control of the script at all times. This regulation upholds the authority and judgement of the examiner in evaluation.

2. To access a final examination script, a student must make a written request to the head of the academic unit in which a course is offered. This request is subject to the following conditions:

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

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

6.7.4 Rereading of Final Examination Scripts

1. A student may apply to have a final examination script reread whether or not he or she has obtained a passing grade in that course.

2. A student is encouraged to request to access the final examination script prior to submitting a request to have the final examination reread. For further information refer to Access to Final Examination Scripts.

3. A student who wishes to have a final examination script reread must make application in writing to the Office of the Registrar within one month of the official release of grades by the University. When
a rereading is requested, the University will make every reasonable attempt to have the rereading conducted by a faculty member(s) other than the original marker(s). Students are advised to refer to relevant academic units for policies and procedures governing rereads of examinations.

4. An appropriate fee per course must be paid at the time of application. For further information refer to Fees and Charges - Reread of Final Examination Fee. If the final letter grade in the course is raised after rereading or if the final numeric grade increases by at least 5%, then the fee is refunded. If the final letter grade in the course is unchanged or lowered, and if the final numeric grade increases by less than 5% or is unchanged or lowered, then the fee is forfeited.
Full Text of Proposed Regulations 6.6 and 6.7

(Track Change Version)
4 Glossary of Terms Used in This Calendar

In-Class Work
is any part of the evaluation in a course which is to be completed by the student in a supervised setting, at a time and location designated by the University.

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

6.4 Registration

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

6.4.26 Auditing of Courses

6.6 Evaluation of Student Work

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

6.6.2 Course Syllabus Informing Students of the Method of Evaluation
1. Before the end of the first week of lectures in any semester or session, the course syllabus shall be made known to students. The course syllabus shall include:
   • the method of evaluation,
   • any required prerequisites or co-requisites,
   • any required textbooks or other resources which must be purchased,
   • the instructor's office hours, and
   • a statement regarding academic misconduct, including a reference to the entry on Academic Misconduct in this Calendar.
2. The method of evaluation and required prerequisites or co-requisites shall be made known to students before the end of the first week of lectures in any semester or session.
3. This information shall be in typewritten or computer-generated format and shall be provided in paper form to the students present in each class during the first week of lectures. In the case of Web-based courses, this information may be provided electronically.
4. The following shall be included in the explanation of the method of evaluation:
• the allocation of marks for all parts of the evaluation, e.g., assignments, laboratory projects, presentations, tests, mid-term examinations, final examinations;
• with the exception of the final examination, the probable dates of all in-class parts of the evaluation, and the probable dates on which all take-home parts of the evaluation are due;
• the approximate dates of all parts of the method of evaluation that will take place in-class, e.g., tests, mid-term examinations, presentations, and assignments;
• the dates on which all parts of the evaluation to be completed out-of-class are due; and
• whether deferred tests or mid-term examinations or extensions of deadlines for out-of-class work are permitted.

3. The course syllabus shall be provided in paper form to students present in class, or in electronic form via a University-approved email account or learning management system.

4. As early as possible following the start of lectures in each semester or session, and no later than the end of the first week of lectures, the course instructor shall file a copy of the course syllabus with the appropriate academic unit.

4. A student who is prevented from writing a test or mid-term examination or completing assigned work by the deadline, by illness or bereavement or other acceptable cause, duly authenticated in writing, may apply, in writing and with supporting documents, for an alternate evaluation. Normally, this application must be made within one week of the original date of the examination or deadline to the course instructor.

5. Methods used for notification of grades earned in all parts of the method of evaluation and for the return of graded evaluative instruments will be in keeping with the Access to Information and Protection of Privacy Act.

6. When it is determined that there will be a common final examination for day and evening sections of a course, students must be so informed in the explanation of the method of evaluation for the course and prior to the end of the registration period.

6.6.3 Scheduling of Parts of the Evaluation

1. Every effort should be made to adhere exactly to the dates given on the course syllabus. Deviations from these dates of one calendar week or less are subject to the restrictions listed in clauses 2 to 5. Longer deviations are permitted only as described under Changing the Method of Evaluation.

2. No laboratory examinations totalling more than one laboratory period in length shall be given in any laboratory course in any week during a lecturing period in any semester or session. Such examinations shall be administered in the laboratory time period assigned for that course section. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for laboratory examinations in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such laboratory examinations do not conflict with regularly scheduled meetings of another course for any student involved.

3. Any other in-class work shall not extend beyond the class period assigned to that course section in any week during a lecturing period in any semester or session. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for in-class work in individual courses in a given semester or session upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such in-class work does not conflict with regularly scheduled meetings of another course for any student involved.
4. No form of evaluation shall take place or be due during the last two weeks of the lecturing period in any semester or the last week of the lecturing period in any session, with the exception of oral exams and presentations, laboratory exams and reports, grading on participation, and take-home work which has been made available to students prior to this part of the lecturing period. Courses taught outside the regular time-frame are exempt from the application of this regulation. In exceptional circumstances, the undergraduate studies committee of the appropriate faculty or school may, upon the recommendation of the head of an academic unit, grant a waiver of this regulation with the proviso that the total value of all parts of the evaluation thereby permitted shall not exceed 20% of the final mark in that course. At the end of each semester, the Senate Committee on Undergraduate Studies must be notified of waivers granted.

5. No evaluation of any nature shall be held or due between the last day of lectures and the start of the formal examination period in any semester or session. The application of this clause to the Faculty of Education (with respect to accelerated courses), the Faculty of Medicine, the School of Human Kinetics and Recreation (with respect to accelerated courses and courses offered outside the normal time frame during the Spring semester) and the School of Nursing is subject to interpretation by the appropriate committee on undergraduate studies.

6. Take-home evaluation which is to be submitted during the formal examination period in any semester or session shall be assigned no later than the last day of classes, and the due date shall be the end of the formal examination period.

7. In the event of an officially declared emergency which results in the cancellation or interruption of in-class work previously scheduled and notified to be held in the final class period of the third-last week of lectures of a semester or the second-last week of lectures of a session, teaching units may reschedule such work in the next regularly scheduled class or as early as possible in the second-last week of lectures of a semester or the last week of lectures of a session. In no circumstances can the rescheduled work be held in the last week of lectures of a semester.

6.6.43 Changing the Method of Evaluation

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

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

6.6.5 Exemptions from Parts of the Evaluation

1. A student who is prevented from completing a part of the evaluation by illness or bereavement or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, for an alternate evaluation. This alternate evaluation may consist of the deferral of in-class work, the extension of the deadline for take-home work, an alternative allocation of marks, or another appropriate accommodation. The application must normally be made to the course instructor within one week of the original date in the case of an in-class part of the evaluation, or within one week of the original deadline in the case of a take-home part of the evaluation. A student who is dissatisfied
with the accommodation offered by the course instructor may consult with the head of the appropriate academic unit.

6.6.4 Good Writing Skills

1. Regardless of the method of evaluation, good writing skills are required for effective communication. Students are, therefore, expected to demonstrate proficiency in logical organization, clarity of expression and grammatical correctness in their writing. For further information refer to Grading—Good Writing.

6.6.5 Completing a Course

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

6.6.6 Correction and Return of Student Work

1. Provided that students submit work by the due date outlined in the method of evaluation, instructors shall mark and return work that is worth a total of at least 20% of the final grade before the last day to drop courses without academic prejudice. This excludes practicums, placements, internships, theses, and courses where a single piece of work is used to determine the entire mark for the course. In exceptional circumstances, a waiver of this clause may be granted to an individual section of a course in a given semester upon application by the course instructor. For courses at the 1000- and 2000-level (and at the 3000- and 4000-level in the case of the Faculty of Engineering and Applied Science), such a waiver may be granted by the Senate Committee on Undergraduate Studies. For all other courses, such a waiver may be granted by the undergraduate studies committee of the appropriate faculty or school. At the end of each semester, the Senate Committee on Undergraduate Studies shall be notified of waivers granted.

2. Instructors shall mark and return all work in a timely manner. In courses where evaluation includes a final examination, provided that students submit work by the due date outlined in the method of evaluation, instructors shall make all reasonable efforts to mark and return all work before the beginning of the examination period, provided that students submit this work by the due date specified in the method of evaluation.

6.7 Final Examinations

6.7.1 Scheduling of Examinations

1. No laboratory examinations totalling more than one laboratory period in length shall be given in any laboratory course in any week during a lecturing period in any semester or session. Such examinations shall be administered in the laboratory time period assigned for that course section. The application of this clause in the Faculty of Engineering and Applied Science and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for laboratory examinations in individual courses in a given term upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that
such laboratory examinations do not conflict with regularly scheduled sessions of another course for any student involved.

2. Any other examinations shall not extend beyond the class period assigned to that course section in any week during the lecture period in any semester or session. The application of this clause in the Faculty of Medicine and the Faculty of Medicine is subject to interpretation by the appropriate committee on undergraduate studies. The Senate Committee on Undergraduate Studies may grant a waiver of this clause for examinations in individual courses in a given term upon recommendation of the appropriate committee on undergraduate studies. Such waivers will be considered only if it can be shown that such examinations do not conflict with regularly scheduled sessions of another course for any student involved.

3. During the last two weeks of the lecture period in any semester or the last week of the lecture period in any session, no examinations or assignments, whether in-class or take home, shall be administered or assigned. However, assignments of which students have been notified under Evaluation may be submitted and oral and laboratory examinations may be administered. The appropriate faculty or school undergraduate studies committee may, upon the recommendation of the head of an academic unit, grant a waiver of this clause with the proviso that the total value of all examinations or assignments thereby permitted in a course shall not exceed 20% of the final mark in that course. Such waivers will be considered only in exceptional circumstances or in the case of particular courses where it can be shown that the nature of the course determines the need for evaluation during the normally prohibited period. In the latter case, students must be notified of the method of evaluation in accordance with Evaluation. At the end of each semester, the Senate Committee on Undergraduate Studies must be notified of waivers granted. Courses taught outside the regular time frame are exempt from the application of this regulation.

4. No examinations of any nature shall be held between the last day of lectures and the start of the formal examination period in any semester or session. The application of this clause to the Faculty of Education (with respect to accelerated courses), the Faculty of Medicine, the School of Human Kinetics and Recreation (with respect to accelerated courses and courses offered outside the normal time frame during the Spring semester), and the School of Nursing is subject to interpretation by the appropriate committee on undergraduate studies.

5. In the event of an officially declared emergency, which results in the cancellation or interruption of in-class examinations or tests previously scheduled and notified to be held in the final class period of the third last week of lectures of a semester or the second last week of lectures of a session, teaching units may reschedule such examinations or tests in the next regularly scheduled class or as early as possible in the second last week of lectures of a semester or the last week of lectures of a session. In no circumstances can the rescheduled examinations or tests be held in the last week of lectures of a semester.

6.7.12 Scheduling of Final Examinations

1. Final examinations, if any, whether of the normal two-hour duration or longer, shall be held in each course at the end of the semester or session during which it was given in accordance with the schedule of examinations published by the Office of the Registrar. The application of this clause to the Bachelor of Education (Intermediate/Secondary) and all degree programs offered by the School of Human Kinetics and Recreation is subject to interpretation by the appropriate committee on undergraduate studies.

2. Normally, course sections offered during the day will have their final examinations, if any, scheduled in the day, and course sections offered in the evening will have their final examinations, if any, scheduled in the evening. When a student is unable, for good reason, to write a final examination scheduled outside the provisions of this clause, the student will be entitled to write a deferred examination. For further information refer to Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations.
3. When an academic unit determines that there will be a common final examination for day and evening sections of a course, students must be so informed in the explanation of the method of evaluation for the course-and prior to the end of the registration period.

4. Where possible, academic units should inform the Office of the Registrar when they submit their class schedules if it is anticipated that a common final examination will be required for day and evening sections of a course, so that this information can be publicized in the class schedule for the appropriate semester or session. Academic units should indicate whether the examination is to be held during the day or the evening.

6.7.23 Exemptions From Final Examinations and Procedures for Applying to Write Deferred Final Examinations

1. A student who is prevented from writing a final examination by illness, bereavement or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, to have the course graded or have the final examination deferred. This application must be made within one week of the original date of the examination to the head of the appropriate academic unit.

2. The decision regarding the request of the student to have a course graded or have the final examination deferred, including information on the appeals route open to the student in the case of a negative decision, must be communicated in writing to the student and to the Registrar within one week of the receipt of the student's complete application. For further information refer to Appeal of Decisions.

3. In those cases where the academic unit accepts the extenuating circumstances the student may be permitted to write a deferred examination or, with the consent of both the academic unit and the student, the grade submitted may be based on term work alone. An interim grade of ABS will be assigned by the academic unit in the case of a student granted a deferred examination. This grade will be replaced by the final grade which must be received by the Registrar within one week following the start of classes in the next academic semester or session.

4. A student who is prevented from writing a deferred examination by illness, bereavement, or other acceptable cause, duly authenticated in writing, may apply, with supporting documents, to the head of the appropriate academic unit to have the deferred examination further deferred. This application must be submitted within one week of the scheduled date of the deferred examination to the head of the appropriate academic unit. The examination will be postponed to a time not later than the last date for examinations in the semester following that in which the student was enrolled in the course.

4-5. A student who is scheduled to write three final examinations which begin and end within a twenty-four-hour period may request to write a deferred examination. Normally, only the second examination in the twenty-four-hour period may be deferred. The application to defer this examination should be submitted as soon as possible after the release of the final examination schedule, and in any case no later than two weeks before the end of the semester or session.

6.7.34 Access to Final Examination Scripts

1. A student has a right to see his or her final examination script. However, the script is the property of the University and the University retains full possession and control of the script at all times. This regulation upholds the authority and judgement of the examiner in evaluation.

2. To access a final examination script, a student must make a written request to the head of the academic unit in which a course is offered. This request is subject to the following conditions:
   - Any such request must be made following release of examination results for the semester or session in which the course was taken and within one month of the official release of grades by the University.
   - The final examination script must be viewed in the presence of the course instructor or other person delegated by the head of the academic unit. Both the instructor and the
student have the right to be accompanied by a registered student or a member of the faculty or staff of the University.

- The final examination script must not be taken away or tampered with in any way.

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

6.7.45 Rereading of Final Examination Scripts

1. A student may apply to have a final examination script reread whether or not he or she has obtained a passing grade in that course.

2. A student is encouraged to request to access the final examination script prior to submitting a request to have the final examination reread. For further information refer to Access to Final Examination Scripts.

2. A student who wishes to have a final examination script reread must make application in writing to the Office of the Registrar within one month of the official release of grades by the University. When a rereading is requested, the University will make every reasonable attempt to have the rereading conducted by a faculty member(s) other than the original marker(s). Students are advised to refer to relevant academic units for policies and procedures governing re-reads of examinations.

3. An appropriate fee per course must be paid at the time of application. For further information refer to Fees and Charges - Reread of Final Examination Fee. If the final letter/numeric grade in the course is raised after rereading or if the final numeric grade increases by at least 5%, then the fee is refunded. If the final letter/numeric grade in the course is unchanged or lowered, and if the final numeric grade increases by less than 5% or is unchanged or lowered, then the fee is forfeited.
MEMORANDUM

05 November 2014

TO: Senior Academic Administrators Group (SAAG)

FROM: Noreen Golfman, Provost and Vice President (Academic) Pro Tempore

SUBJECT: Consultation on New Travel Outside of Canada Policy

We would like to draw your attention to a new draft Travel Outside of Canada Policy.

The draft policy is intended to establish appropriate responsibilities and procedures to minimize the risks for all employees, students and other affiliated persons who are participating in University-related activities outside of Canada.

This policy was developed by a working group established by the former Provost, Dr. David Wardlaw. In accordance with the University’s policy framework process, the draft policy statement and related documents are now available for consultation at http://www.mun.ca/policy/status.

I would appreciate your promulgating this message to all faculty, staff and students in your unit. For those who chair academic/faculty councils, I would appreciate your bringing this information forward to a meeting of the academic/faculty council of your unit.

Feedback will be accepted until December 12, 2014 and can be sent to policyoffice@mun.ca. Thank you for your time and consideration.

mh
c  Donna Ball, Policy Office
10 October 2014

TO: Deans and Department Heads (St. John's Campus), Vice-President (Grenfell Campus and Marine Institute) Chairpersons and Secretaries, Academic Councils (Faculties/Schools/Grenfell Campus/Marine Institute)

FROM: Secretary, Senate Committee on Undergraduate Studies

SUBJECT: Date for Submission of Calendar Changes – 2015-2016

I am writing to advise you about deadlines for submission of changes for the 2015-2016 University Calendar. In order to meet deadlines for publication, all calendar changes, including changes to existing courses and programs and proposals for new courses and programs, must be presented to Senate for approval not later than the February meeting which is scheduled for 10 February 2015. As you know, items must go through a number of levels of approval from faculty/school/campus/institute undergraduate studies committees and academic councils, to the Senate Committee on Undergraduate Studies before being submitted to the Executive Committee of Senate for Senate. This means that submissions intended for next year’s calendar should be forwarded to your undergraduate studies committees as soon as possible. Meeting times for Senate, the Executive Committee of Senate and the Senate Committee on Undergraduate Studies are as follows and I have indicated the dates by which submissions must be received by the Senate Committee on Undergraduate Studies in order to be included on the Senate agenda for its meeting in February.

Senate:
- Meets 10 February 2015

Executive Committee of Senate:
- Meets 29 January 2015

Senate Committee on Undergraduate Studies:
- Meets 8 January 2015; items to be considered at this meeting must be received by the Secretary of the Committee no later than Tuesday, 16 December 2014, and must be approved without revisions at that meeting. Any calendar changes requiring revisions or further consultation cannot meet publication deadlines.

In order to expedite the approval process, Senate asks that the Senate Committee on Undergraduate Studies seek uniformity in submissions from various academic units and, to that end, four individual forms are available for submission of calendar changes. These forms have been designed to provide guidance regarding the information that is required for approval of academic proposals and must be used by academic units for any changes being submitted for the University Calendar. When preparing calendar changes, special attention should be given to the Executive Summary, Library Holdings and Consultation sections of the forms.

The forms are available in both Word Perfect and MS-Word versions at www.mun.ca/regoff/home/ under both Related Content (Forms for Calendar Changes) and Office of the Registrar Links (Forms/Applications) (Other Forms) (Forms for Calendar Changes). Samples of calendar changes that have been approved by the Senate Committee on Undergraduate Studies are also available for information and guidance in preparing calendar changes. A distribution list to use for consultation on calendar changes has also been posted on the website. Should you encounter difficulties accessing these documents, please contact Linda Noseworthy, Recording Secretary of the Senate Committee on Undergraduate Studies (lnosewor@mun.ca, phone 864-4421).

In order to further expedite the approval process and to provide documentation to Senate that is clear and concise, the Senate Committee on Undergraduate Studies is asking that calendar changes be forwarded for approval from one level to the next electronically in both MS-Word/Word Perfect and PDF versions.

If you have any questions regarding the above, please get in touch with me by phone at 864-4410 or by e-mail at importer@mun.ca.

Thank you,

[Signature]
Jennifer Porter
Deputy Registrar and Secretary to the Committee

cc: Chairpersons and Secretaries, Undergraduate Studies Committees

PS: Please forward this memorandum to all staff in your academic unit who are involved in the preparation of calendar changes.
Hello Gail,

the Mat & Stats changes to the calendar that includes the request for approval of one course and regularization of other two has been approved with 8 votes in favour (Len, Christina, Kapil, Ian, Ratana, Minglun, Sukhinder and myself), none against. Now, it can go for the approval of the Faculty Council.

Salud,
-j

---------- Forwarded Message ----------
Subject: FW: changes to the calendar
Date: Tue, 14 Oct 2014 14:17:01 -0230
From: JC Loredo-Osti <jcloredoosti@mun.ca>
To: Kapil Tahlan <ktahlan@mun.ca>, Ian Fleming <ifleming@mun.ca>, Christina Bottaro <cbottaro@mun.ca>, JC Loredo-Osti <jcloredoosti@mun.ca>, Todd Andrews <tandrews@mun.ca>, Gail Kenny <gkenny@mun.ca>, Sukhinder Kaur Cheema <skaur@mun.ca>, Len Zedel <zedel@mun.ca>, Brent Snook <bsnook@play.psych.mun.ca>, Ratana Chuenpagdee <ratanac@mun.ca>, Minglun Gong <gong@mun.ca>, Kareem Azmy <kazmy@mun.ca>

Hello All,

attached are changes to the MAS programme (substitution of STAT5590 by one applied regular course from and a pass/fail consulting course, STAT5591; MAS changes also involve regularization of two special topics courses) and other housekeeping modifications to the calendar for all the other Maths & Stats department graduate programmes. The MAS changes came for approval last academic year, but the numbering of the sections of the calendar to be changed was incorrect. The current version replaces the March 2014 one.

Please, review and let me know your opinion at your earliest convenience.

Best regards,
-j

---------- Forwarded Message ----------
Subject: FW: changes to the calendar
Date: Tue, 14 Oct 2014 16:14:10 +0000
From: Kenny, Gail <gkenny@mun.ca>
To: JC Loredo-Osti <jcloredoosti@mun.ca>, MathStat Graduate Officer <mathgrad@mun.ca>
Hello JC,

I am forwarding a request by Math and Stats for calendar changes approval by the Graduate Studies committee of Faculty Council.

Gail
MEMORANDUM
October 14, 2014.

TO: Faculty of Sciences Graduate Studies Committee.
FROM: JC Loredo-Osti, Mathematics and Statistics Graduate Officer.
SUBJECT: Changes to the Mathematics and Statistics Graduate programmes.

The following changes to the Master of Applied Statistics and the list of courses to the statistic programmes were approved in the department faculty meeting of March 12, 2014.

1. Remove STAT 6590 from the list of requirements and replace it with STAT 6591 and one course from the following list: STAT 6530, STAT 6571 or STAT 6573. 
   Rationale: STAT 6590 is a three credit hours course in consulting, however, the department no longer operates a statistics consulting centre so such a course is no longer viable.

2. STAT 6591 is a one credit hour pass/fail course designed to set up the consulting project that the student will develop to complete his/her practicum.

3. The courses STAT 6571 (Financial and environmental time series) and STAT 6573 (Statistical genetics) are currently applied special topics courses that have been offered regularly and in order to have the as options to replace STAT 6590, they need to be regularized. Documentation for such regularization is attached.

4. Make available the regularized courses STAT 6571 and STAT 6573 to the other statistics programmes and redefine the numbers for special topics courses.

The following changes to the Mathematics and Statistics programmes were approved in the department meeting of October 5, 2014.

1. Remove an ancillary list of courses from the section 25.18.1 of the calendar.

2. Remove from the list of speciality PhD courses the basic Masters core courses (6310, 6332, 6351, 6510 and 6560) and add a note clarifying that these courses cannot be used to fulfil the minimum PhD course requirements.

3. Clarification on eligibility for transferring Masters students to a PhD programme.

J C. Loredo-Osti
Maths & Stats changes to the University Calendar approved March 12, 2014 and October 5, 2014.

7 Regulations Governing the Degree of Master of Applied Statistics

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

1. The three credit hours courses STAT 6510 and STAT 6560 plus one from STAT 6530, STAT 6571 or STAT 6573. The courses: STAT 6510, STAT 6560 and STAT 6590.

2. Nine additional credit hours selected from STAT 6500-6589.

3. The series STAT 697A/B or the completion of an additional 3 credit hour graduate course from STAT 6500-6589.

4. STAT 6591 and a practicum, i.e., an applied statistics project with its associated report. The report must demonstrate a satisfactory general mastery of applied statistical knowledge.

7.3 Evaluation

1. In order to continue in graduate studies and in order to qualify for a Master’s Degree, a candidate shall obtain an A or B for program courses, a pass for STAT 697A/B and STAT 6591 and complete successfully the practicum requirement.

2. STAT 6591, 6590 will be evaluated by the student’s consulting project supervisor, course co-ordinator in consultation with associated statistical consultants.

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

- Applied Statistics
  - 6500 Probability (credit restricted with former 6586)
  - 6503 Stochastic Processes
  - 6505 Survival Analysis
  - 6510 Mathematical Statistics
  - 6520 Linear Models
  - 6530 Generalized Linear Longitudinal Mixed Models
  - 6540 Time Series Analysis
  - 6545 Statistical Computing
  - 6550 Nonparametric Statistics
  - 6560 Continuous Multivariate Analysis
  - 6561 Categorical Data Analysis
  - 6563 Sampling Theory
  - 6571 Financial and Environmental Time Series
  - 6573 Statistical Genetics
  - 6574, 6570-6589 Selected Topics in Statistics and Probability (excluding 6586)
  - 6590 A Course in Statistical Consulting (1 credit hour)
  - 697A/B Graduate Seminar Series in Statistics (2 credit hours)
25 Regulations Governing the Degree of Master of Science

25.18.1 Specific Requirements for the M.Sc. in Mathematics

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

1. Option 1: MATH 6310, 6351 and 696A/B, a minimum of 9 further credit hours in courses chosen from the departmental course offerings, excluding MATH 6299, and a thesis as per General Regulations, Theses and Reports.

2. Option 2: MATH 6299, 6310, 6332, 6351, 696A/B, and a minimum of 12 further credit hours in courses chosen from the departmental course offerings.

→ Algebra: 6320, 6321
→ Analysis: 6310, 6311, 6312
→ Applied Mathematics: 6100, 6201 or 6242, 6120
→ Combinatorics: 6340, 6341, 6342
→ Topology: 6300 or 6301, 6332

25.18.3 Courses

6550 Nonparametric Statistics
6560 Continuous Multivariate Analysis
6561 Categorical Data Analysis
6563 Sampling Theory
6571 Financial and Environmental Time Series
6573 Statistical Genetics
6574 6575-6579 Selected Topics in Statistics and Probability (excluding 6586)
697A/B Graduate Seminar Series in Statistics (2 credit hours)

31 Regulations Governing the Degree of Doctor of Philosophy

31.25 Mathematics and Statistics

31.25.2 Specific Regulations for the Ph.D. in Mathematics

A Masters Degree in mathematics or related area from a recognized university is normally required for entry into the Ph.D. program. Students holding a Bachelors Degree (Honours or equivalent) in mathematics may be considered for direct admission into the Ph.D. program. Students currently registered in their first year at Memorial University of Newfoundland's M.Sc. program in mathematics who have obtained a in at least four programme courses are eligible to be transferred may request a transfer into a Ph.D. program. Such transfer must be supported by the intended a prospective Ph.D. supervisory committee and as well as the Graduate Studies Committee and approved by the Dean. Transferred students shall finish their Masters program plus the minimum PhD course requirements.
31.25.3 Specific Regulations for the Ph.D. in Statistics

A Masters Degree in statistics from a recognized university is normally required for entry into the Ph.D. program. Students currently registered in their first year at Memorial University of Newfoundland’s MAS or M.Sc. program in statistics who have obtained A in at least four programme courses are eligible to be transferred may request a transfer into a Ph.D. program. Such transfer must be supported by the intended prospective Ph.D. supervisory committee and as well as the Graduate Studies Committee and approved by the Dean. Transferred students shall finish their Masters program plus the minimum PhD course requirements.

31.25.4 Courses

6304-6309 Special Topics in Topology
6310 Functional Analysis
6311 Complex Analysis

6330 Analytic Number Theory
6331 Algebraic Number Theory
6332 Point Set Topology
6340 Graph Theory
6341 Combinatorial Design Theory
6342 Advanced Enumeration
6343-6349 Special Topics in Combinatorics
6351 Advanced Linear Algebra

6505 Survival Analysis
6510 Mathematical Statistics
6520 Linear Models
6530 Generalized Linear Longitudinal Mixed Models
6540 Time Series Analysis
6545 Statistical Computing
6550 Nonparametric Statistics
6560 Continuous Multivariate Analysis
6561 Categorical Data Analysis
6563 Sampling Theory
6571 Financial and Environmental Time Series
6572 Statistical Genetics
6574-6579 Selected Topics in Statistics and Probability (excluding 6586)

Notice that, although the courses 6310, 6332, 6351, 6510 and 6560 cannot be used to fulfill the 6 credit hours graduate courses requirement, any of them can be part of the program of study as additional course work whenever the supervisory committee deems it appropriate.
Request for Approval of a Graduate Course

_Adobe Reader, minimum version 8, is required to complete this form._ Download the latest version: [http://get.adobe.com/reader](http://get.adobe.com/reader). (1) Save the form by clicking on the diskette icon on the upper left side of the screen; (2) Ensure that you are saving the file in PDF format; (3) Specify where you would like to save the file, e.g., Desktop; (4) Fill in the required data and save the file; (5) Submit the completed form to:

_School of Graduate Studies: Memorial University of Newfoundland; JIC-2012 (Bruneau Centre for Research and Innovation); St. John's, NL A1C 5S7 Canada Fax: 709.864.4702 eMail: sgs@mun.ca_

To: Dean, School of Graduate Studies
From: Faculty/School/Department/Program
Subject: ☑ Regular Course ☐ Special/Selected Topics Course

Course No.: STAT-6591

Course Title: Statistical consulting

I. To be completed for all requests:

A. Course Type:
   ☐ Lecture course
   ☑ Laboratory course
   ☐ Directed readings
   ☐ Lecture course with laboratory
   ☐ Undergraduate course
   ☐ Other (please specify)

B. Can this course be offered by existing faculty? ☑ Yes ☐ No

C. Will this course require new funding (including Payment of Instructor, labs, equipment, etc.)? ☐ Yes ☑ No
   If yes, please specify:

D. Credit hours for this course: 1

E. Estimated number of contact hours per semester: 25

F. Course description (reading list required):
   This pass/fail course is intended to set up the consulting project on which the student will develop his/her practicum

G. Method of evaluation:

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Total 100

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1 Must specify the additional work at the graduate level
II. To be completed for special/selected topics course requests only

For special/selected topics courses, there is no evidence of:

Instructor's initials

1. duplication of thesis work

2. double credit

3. work that is a faculty research product

4. overlap with existing courses

Recommended for offering in the  □ Fall  □ Winter  □ Spring  20___

Length of session if less than a semester:

III. This course proposal has been prepared in accordance with General Regulations governing the School of Graduate Studies

Course instructor

[Signature]

Approval of the head of the academic unit

Date

[Signature]  17 Oct 20___

IV. This course proposal was approved by the Faculty/School/Council

Secretary, Faculty/School/Council

Date

Updated October 2011
Request for Approval of a Graduate Course

Adobe Reader, minimum version 8, is required to complete this form. Download the latest version: http://get.adobe.com/reader. (1) Save the form by clicking on the diskette icon on the upper left side of the screen; (2) Ensure that you are saving the file in PDF format; (3) Specify where you would like to save the file, e.g. Desktop; (4) Fill in the required data and save the file; (5) Submit the completed form to:

School of Graduate Studies: Memorial University of Newfoundland; IIIC-2012 (Bruneau Centre for Research and Innovation); St. John's, NL A1C 5S7 Canada Fax: 709.864.4702 eMail: sgs@mun.ca

To: Dean, School of Graduate Studies  
From: Faculty/School/Department/Program  
Subject: ☑ Regular Course ☐ Special/Selected Topics Course

Course No.: STAT-6571
Course Title: Financial and environmental time series

I. To be completed for all requests:

A. Course Type: ☑ Lecture course ☐ Lecture course with laboratory  
☐ Laboratory course ☐ Undergraduate course  
☐ Directed readings ☐ Other (please specify)

B. Can this course be offered by existing faculty? ☑ Yes ☐ No

C. Will this course require new funding (including payment of instructor, labs, equipment, etc.)?  
Yes ☐ No ☑

If yes, please specify:

D. Credit hours for this course: 3

E. Estimated number of contact hours per semester: 45

F. Course description (reading list required):  
See attachment

G. Method of evaluation:  

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1 Must specify the additional work at the graduate level
II. To be completed for special/selected topics course requests only

For special/selected topics courses, there is no evidence of:

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<td>1. duplication of thesis work</td>
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<td>2. double credit</td>
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<tr>
<td>3. work that is a faculty research product</td>
</tr>
<tr>
<td>4. overlap with existing courses</td>
</tr>
</tbody>
</table>

Recommended for offering in the

- [ ] Fall
- [✓] Winter
- [ ] Spring

Length of session if less than a semester:

III. This course proposal has been prepared in accordance with General Regulations governing the School of Graduate Studies

Course instructor

[Signature]

Approval of the head of the academic unit

[Signature]

Date

8 April 2014

Date

IV. This course proposal was approved by the Faculty/School/Council

Secretary, Faculty/School/Council

[Signature]

Date

Updated October 2011
Request for Approval of a Graduate Course

Adobe Reader, minimum version 8, is required to complete this form. Download the latest version: http://get.adobe.com/reader. (1) Save the form by clicking on the diskette icon on the upper left side of the screen; (2) Ensure that you are saving the file in PDF format; (3) Specify where you would like to save the file, e.g. Desktop; (4) Fill in the required data and save the file; (5) Submit the completed form to:

School of Graduate Studies; Memorial University of Newfoundland; IIC-2012 (Bruneau Centre for Research and Innovation); St. John’s, NL A1C 5S7 Canada Fax: 709.864.4702 eMail: sgs@mun.ca

To: Dean, School of Graduate Studies
From: Faculty/School/Department/Program
Subject: ☑ Regular Course ☐ Special/Selected Topics Course

Course No.: STAT-6573

Course Title: Statistical genetics

I. To be completed for all requests:

A. Course Type:
   ☑ Lecture course
   ☐ Laboratory course
   ☐ Directed readings
   ☐ Lecture course with laboratory
   ☐ Undergraduate course
   ☐ Other (please specify)

B. Can this course be offered by existing faculty? ☑ Yes ☐ No

C. Will this course require new funding (including payment of instructor, labs, equipment, etc.)? ☑ Yes ☐ No
   If yes, please specify:

D. Credit hours for this course: 3

E. Estimated number of contact hours per semester: 45

F. Course description (reading list required):
   See attachment

G. Method of evaluation:

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1 Must specify the additional work at the graduate level
II. To be completed for special/selected topics course requests only

For special/selected topics courses, there is no evidence of:

Instructor's initials

1. Duplication of thesis work
2. Double credit
3. Work that is a faculty research product
4. Overlap with existing courses

Recommended for offering in the

☐ Fall  ☑ Winter  ☐ Spring  20

Length of session if less than a semester:

III. This course proposal has been prepared in accordance with General Regulations governing the School of Graduate Studies

Course instructor

[Signature]

Approval of the head of the academic unit

[Signature]

Date

8 April 2014

Date

IV. This course proposal was approved by the Faculty/School/Council

Secretary, Faculty/School/Council

Date

Updated October 2011
Statistics 6573 - Statistical genetics

Preamble

In recent years, a very large variety of statistical methodologies, at various levels of complexity, have been put forward to analyse genotype data and detect genetic variations that may be responsible for increasing the susceptibility to disease. This course provides a concise account of a number of basic statistical methods for family-based linkage and association studies as well as population-based association mapping, from single-marker tests of association to multi-marker data mining techniques and gene/gene interaction detection.

Objective

This course is for students of statistics, biostatistics and epidemiology with little genetics background but with working knowledge of probability and statistics. The course covers the fundamental statistical problems in genetics, with an emphasis on human genetics. The aim of the course is to provide students necessary background and prepare them for advanced study and research in the area of statistical genetics as well as provide them with hands-on experience in the analysis of generic/genomic datasets.

Recommended texts

Tentative course outline

Statistical genetics is a very dynamic area where new problems and solutions are posed as technology advances. Since the objective is to introduce the students to the state-of-the-art methodologies, it is recommended that its content be reviewed each time that the course is offered.

1. Basic concepts. Mendelian inheritance, study designs, ascertainment bias, confounding.
5. Pedigree analysis. Binary, categorical and quantitative traits.
7. A gentle introduction to the coalescent theory.
8. Association and linkage disequilibrium. Candidate gene and candidate region studies. Multiple testing and other statistical issues.

Prerequisites

A working knowledge of probability and statistical inference or consent from the instructor.
Stat 6571 : Financial and Environmental Time Series

Preamble

The classical time series analysis mainly deals with the modelling of correlations among real valued repeated responses in the series with stationary mean and variance. This helps for forecasting among other things. Some of the models are ARMA (auto-regressive moving average) and SARMA (Seasonal ARMA) when the original series has stationary mean. If the series has non-stationary mean, a transformation is applied to make the series stationary and then correlations are modeled subsequently. These models are referred to as ARIMA (autoregressive integrated moving average) and SARIMA models. However, many financial time series such as stock return series exhibit non-stationary (heteroscedastic) variances and hence classical modeling for correlations is no longer appropriate. This type of data are known as volatile data and they are analyzed by fitting standard volatility (SV) model and conditional heteroscedastic models such as ARCH (autoregressive conditional heteroscedastic) and GARCH (generalized ARCH) models. For its practical importance, statisticians and econometricians have done many significant research in this area over the last two decades. Many journals are founded and many text books are also written covering the research in this area. Among the journals, JBES (Journal of business and economic statistics, ASA publication), Journal of Econometrics, and Econometrica frequently publish research papers in this financial time series area.

Similar to the financial time series there are environmental and ecological time series where classical time series modeling may not be applicable. However, because environmental and ecological data are usually space and time oriented, the ARCH and GARCH modeling used for financial time series, are also not applicable to such data. In stead, modeling spatial and temporal correlations become important. Spatial correlations are usually taken care of
through certain spatial random effects and temporal correlations are accommodated through certain dynamic modeling. The research in this area became so important that many journals are devoting their whole space to publish papers mainly with spatial-temporal techniques. For example, one may refer to The Journal of Environmental Statistics, Environmental and Ecological Statistics, Environmetrics, and Journal of Agricultural Biological and Environmental Statistics. Many text books at graduate level are also written.

As the graduate program is expanding, it appears that it is right time to regularize the offering of this applied time series course covering research problems in two very important areas, financial, and environmental and ecological areas.

Course outline

Part I. Financial Time Series

1. Financial Time Series and Their Characteristics: Asset returns; Distributional properties of returns; Processes considered.
2. Review of Classical (linear) Time Series.
3. Volatility: Stochastic volatility; Normal, t, and Gamma errors based stochastic volatility; Moments, GMM (generalized method of moments), QML (quasi-maximum likelihood) estimation, Monte carlo approach; Application to stock returns.
4. Conditional Heteroscedastic Models: ARCH model; GARCH model; Integrated GARCH model; Exponential GARCH Model; Threshold GARCH Model; Kurtosis of GARCH models; Application; Multivariate GARCH models.

Reference books:

Part II. Environmental Time Series


6. Hierarchical Dynamical Spatio-temporal Models (DSTM): Data models for DSTM (linear and non-linear mapping); Process models for DSTM (linear and non-linear models).

7. Implementation and Inference: Inference for DSTM linear process (Kalman filter); Inference for DSTM parameters (Empirical hierarchical modeling via EM algorithm, Bayesian hierarchical modeling via Gibbs sampler); Inference for non-linear DSTM (extended Kalman filter, Bayesian hierarchical modeling via MCMC).


Reference Book:

Prerequisites

One course on statistical inference and one on time series or consent from the instructor.
Hello Gail,

the programme name change request has received 7 votes in favour (Ian, Mingun, Kapil, Ratana, Kareem, Christina and myself), none against. Thus, it is ready to go for approval of the Faculty Council.

Regards,
-j

On 31/10/14 01:42 PM, Kenny, Gail wrote:
> HI JC,
> >
> > See attached document for discussion/approval by the GS committee. Thanks.
> >
> > Gail
> >
> > From: Brent Snook [mailto:brent.snook@gmail.com] On Behalf Of Brent
> > Snook
> > Sent: October-27-14 11:48 AM
> > To: Kenny, Gail
> > Subject: Calendar Change
> >
> >
> > Hi Gail,
> >
> > The Social Psychology Group requested a name change to their Applied Social Psychology degree. They requested that the name be changed from Master of Applied Social Psychology to Master of Applied Psychological Science. This request was approved by the department of psychology on October 22, 2014.
> >
> > Regards,
> > Brent
> >
> > Brent Snook, PhD
> > Professor of Psychology
> > Memorial University
> > 709.864.3101
> > bsnook@mun.ca

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JC Loredo-Osti, Professor
Department of Mathematics and Statistics
Memorial University
To: Graduate Studies Committee

From: Social Psychology Group

October 7, 2014

The Social Psychology Group would like to request a name change to our Applied Social Psychology degree. We are requesting that the name be changed from Master of Applied Social Psychology to Master of Applied Psychological Science.

Rationale: This change would reflect the evolution of our program from a narrower focus on social psychological issues to a broader emphasis on program evaluation and applied research across a wide range of areas, including education, health, child development, industry standards, workplace issues, public policy, consumer behaviour, marketing, justice and legal issues. We have had students who been placed in all of these areas over the last several years.

The name change would also be more inclusive and consistent with our goal of expanding the degree to students who wish to focus on cognate areas such as developmental and cognitive psychology.

We have also received feedback from students and from employers that the current name is overly restrictive and does not convey the breadth of training our students have. Co-op partners frequently report not understanding what our students might be able to contribute to their workplace or research programs.

No other changes are required for this name change.
6 Regulations Governing the Degree of Master of Applied Social-Psychology Psychological Science (Co-operative)

This program is designed to meet the needs of both students and employers. Students will gain the skills and knowledge necessary to ask appropriate questions and conduct research in a variety of applied settings (e.g., business, government, health care, etc.). Students completing the program will be qualified for either immediate employment or further education. Students' and employers' needs will be met by a program that combines training in basic scientific methods and social psychological theory with practical experience in a variety of work settings. The training in methods and theory will be provided by the academic component of the program and the practical experience will be provided by the cooperative, work term component.

6.1 Qualifications for Admission

1. Admission to the program is competitive and selective. To be considered for admission to the Master of Applied Social-Psychology Psychological Science (Co-operative) an applicant shall normally hold at least a high second class Honours degree or its equivalent, both in achievement and depth of study, from an institution recognized by the Senate.

2. Applications
   a. All applicants are required to submit results from the General section of the Graduate Record Examinations.
   b. Applicants are required to submit with their applications an example of their academic writing. This could include, but is not limited to, papers submitted in class, honour's thesis, etc.
   c. At least one letter of reference should come from someone who is familiar with the applicant's research capability.

3. Election will be based on an applicant’s overall academic performance, scores on the Graduate Record Examination and letters of reference.

Admission to the program shall be upon acceptance by the Dean of Graduate Studies after recommendation by the Head of the Department of Psychology which will include a proposed program of study and a proposed Supervisor.

6.1 Qualifications for Admission

4. Admission to the program is competitive and selective. To be considered for admission to the Master of Applied Social-Psychology Psychological Science (Co-operative) an applicant shall normally hold at least a high second class Honours degree or its equivalent, both in achievement and depth of study, from an institution recognized by the Senate.

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At least one letter of reference should come from someone who is familiar with the applicant's research capability.

6. Election will be based on an applicant's overall academic performance, scores on the Graduate Record Examination and letters of reference. Admission to the program shall be upon acceptance by the Dean of Graduate Studies after recommendation by the Head of the Department of Psychology which will include a proposed program of study and a proposed Supervisor.

6.3 Evaluation and Advancement

7. In order to continue in good standing in the program and in order to qualify for the Master's Degree, a candidate shall obtain a grade of A or B for program courses, and complete two Work Terms.

8. The dates for starting and finishing each Work Term are shown in the University Diary. Successful completion of the Work Term requirements is a prerequisite to graduation.

9. A competition for Work Term employment is organized by the Division of Co-operative Education. Students may also obtain their own Work Term jobs outside the competition. Such jobs must be confirmed by letter from the employer and approved by the Head of Psychology and by the Division of Co-operative Education on or before the first day of the Work Term. Work Term jobs may be outside St. John's and possibly outside Newfoundland and Labrador. Students who do not wish to accept a Work Term job arranged by Division of Co-operative Education shall be responsible for finding an alternative acceptable to the Head of Psychology and the Division of Co-operative Education. By entering the competition, students give permission for the Division of Co-operative Education to supply their University transcripts to potential employers.

10. The overall evaluation of the Work Term is the responsibility of the Division of Co-operative Education. The Work Term evaluation shall consist of two components:

a. On-the-job Student Performance: Job performance shall be assessed by a co-ordinator using information gathered during the Work Term and input from the employer towards the end of the Work Term. Formal written documentation from the employer shall be sought.

b. The Work Report:

1 Work term reports shall be evaluated by a member of the faculty in the Department of Psychology. If an employer designates a report to be of a confidential nature, both employer and faculty member must agree as to the methods to protect the confidentiality of such a report before the report may be accepted for evaluation.

2 Reports must be prepared according to American Psychological Association specifications and contain original work related to the Work Term placement. The topic must relate to the work experience and will be chosen by the student in consultation with the employer. For promotion from the Work Term, a student must obtain at least 65% in each component.

11. If a student fails to achieve the Work Term standards specified above the
student will be required to withdraw from the program. Such a student may
reapply to the program after lapse of two semesters, at which time the
student will be required to complete a further Work Term with satisfactory
performance before being admitted to any further academic term in the
Faculty. A Work Term may be repeated once.
Students are not permitted to drop Work Terms without prior approval of the
Graduate Studies Committee of the Department of Psychology, upon the
recommendation of the Division of Co-operative Education. The Graduate
Studies Committee will make a recommendation to the Head of Department
who will make the final decision. Students who drop a Work Term without
permission, or who fail to honour an agreement to work with an employer, or
who conduct themselves in such a manner as to cause their discharge from
the job, will normally be awarded a failed grade for the Work Term. Permission
to drop a Work Term does not constitute a waiver of degree requirements,
and students who have obtained such permission must complete an
approved Work Term in lieu of the one dropped.

6.4 Courses
A selection of the following graduate courses will be offered to meet the
requirements of candidates, as far as the resources of the Department will
allow. Other courses may be offered on the recommendation of the Head of
Psychology.

12. 6000 Advanced Statistics in Psychology
13. 6001 Research Design
14. 6010 Colloquium Series in Psychology (repeatable, non-credit)
15. 601W Work Term 1
16. 602W Work Term 2
17. 6400 Theory and Methods in Social Psychology
18. 6401 Social Cognition
19. 6402 Group Processes
20. 6403 Program Evaluation and Applied Research

  _______6404 Project in Applied Social-Psychology-Psychological

Science
Hello Gail,

CHEM 6296 has been approved with 8 votes in favour (Karem, Ratana, Sukhinder, Ian, Kapil, Mingun, Christina and myself), none against. Now, it can go to the Faculty council for information.

Salud,

j

On 10/16/2014 09:41 AM, Kenny, Gail wrote:

> Hello JC,
> I have attached the updated paperwork for CHEM 6296 for approval by the GS committee. Christina Bottaro's email is below explaining that the plan to offer the course in conjunction with an undergrad course has been revised and it will now be a stand-alone graduate course.
> Gail
>
> From: Christina Bottaro [mailto:cbottaro@mun.ca]
> Sent: October-15-14 4:30 PM
> To: Kenny, Gail; 'JC Loredo-Osti'
> Cc: 'Peter Pickup'; kozak@mun.ca
> Subject: FW: FW: Directed readings graduate course for winter 2015
> 
> Hi Gail,
> Please find attached a revised request for a new special topics course to be offered by Dr. Chris Kozak in Winter 2015. I understand you work your administrative magic on it before sending it to JC.
> Note that this is the same course that we proposed earlier to be linked to an undergraduate course. As we have come to understand that this highly discouraged, so this course will NOT be linked to an undergraduate course and is offered solely as a stand-alone graduate course. The attached documents reflect the change.
> 
> Cheers,
> Christina
>
> --
> JC Loredo-Osti, Professor
> Department of Mathematics and Statistics Memorial University
> Phone: +(709) 864 8729

"Wisdom comes to us when it can no longer do any good."
--Gabriel Garcia Marquez (Love in the time of cholera).
October 17, 2014

TO: Dr. Faye Murrin, Dean pro tempore
    School of Graduate Studies

FROM: Secretary, Faculty of Science Faculty Council

SUBJECT: Special Topics Course - CHEM 6296, Metal-mediated Reactions and Catalysis

This is to confirm that special topics course, CHEM 6296, Metal-mediated Reactions and Catalysis, has been approved by the Faculty of Science Faculty Council Graduate Studies Committee.

The Request for Approval of a Graduate Course form is attached. If you require more information please let me know.

Julie D. Rideout
Secretary, Faculty of Science Faculty Council

/gbk

cc: L. Goodland, Registrar’s Office
   E. Penney, Department of Chemistry
Request for Approval of a Graduate Course

Adobe Reader, minimum version 8, is required to complete this form. Download the latest version: http://get.adobe.com/reader. (1) Save the form by clicking on the diskette icon on the upper left side of the screen; (2) Ensure that you are saving the file in PDF format; (3) Specify where you would like to save the file, e.g. Desktop; (4) Fill in the required data and save the file; (5) Submit the completed form to:

School of Graduate Studies: Memorial University of Newfoundland; IIC-2012 (Bruno Centre for Research and Innovation); St. John’s, NL A1C 5S7 Canada Fax: 709.864.4702 eMail: sgs@mun.ca

To: Dean, School of Graduate Studies  
From: Faculty/School/Department/Program  
Subject: Regular Course □  Special/Selected Topics Course □

Course No.: CHEM 6296  
Course Title: Metal-mediated Reactions and Catalysis

I. To be completed for all requests:

A. Course Type:  
□ Lecture course  
□ Laboratory course  
☑ Directed readings  
□ Lecture course with laboratory  
□ Undergraduate course  
☑ Other (please specify) Term paper and oral present'n

B. Can this course be offered by existing faculty?  
☑ Yes □ No

C. Will this course require new funding (including Payment of instructor, labs, equipment, etc.)?  
☑ Yes □ No

If yes, please specify:

D. Credit hours for this course: 3

E. Estimated number of contact hours per semester: 30 h

F. Course description (reading list required):  
Please see attached

G. Method of evaluation:  

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<thead>
<tr>
<th>Written</th>
<th>Percentage</th>
<th>Oral</th>
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<tbody>
<tr>
<td>Class tests</td>
<td>20%</td>
<td></td>
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<tr>
<td>Assignments</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
<td>30%</td>
<td>10%</td>
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<tr>
<td>Term paper and oral present'n</td>
<td>30%</td>
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<tr>
<td>Final examination:</td>
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<tr>
<td>Total</td>
<td>90%</td>
<td>10%</td>
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</table>

1 Must specify the additional work at the graduate level
II. To be completed for special/selected topics course requests only

For special/selected topics courses, there is no evidence of:

<table>
<thead>
<tr>
<th>Instructor's Initials</th>
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</thead>
<tbody>
<tr>
<td>1. duplication of thesis work</td>
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<tr>
<td>2. double credit</td>
</tr>
<tr>
<td>3. work that is a faculty research product</td>
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<tr>
<td>4. overlap with existing courses</td>
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</tbody>
</table>

Recommended for offering in the

- [ ] Fall
- [x] Winter
- [ ] Spring

Length of session if less than a semester:

III. This course proposal has been prepared in accordance with General Regulations governing the School of Graduate Studies

Chris Kozak

Course Instructor

Date: 2014.10.15 15:03:24 -04'30"

Approval of the Head of the academic unit

Date

16 Oct 2014

IV. This course proposal was approved by the Faculty/School/Council

Julie Rideout

Secretary, Faculty/School/Council

Date

Oct 19, 14

Updated October 2011
Chemistry 6296: Special Topics in Metal-Mediated Reactions and Catalysis

Instructor: Prof. Chris Kozak (ckozak@mun.ca) office C2018, lab C5006

Class times: To be decided

Location: TBD

Texts for 6296:
There is no single text for this course, but materials will be taken primarily from the following sources.
"Catalysis: Concepts and Green Applications", by Gadi Rothenburg

Other Texts Available in the Library:
QD 411.8 T73 H37 2010 "Organotransition metal chemistry: from bonding to catalysis" Hartwig, John F.
QD 411 S65 1997 "Organometallic chemistry" Spessard, Gary O. (2nd Ed. available as electronic resource via library)
QD 411 O73 1994 "Organometallic reagents in organic synthesis" Bateson, J. H.
QD 411 M397 1991 "Organometallic chemistry: a unified approach" Mehrotra, Ram C.
QD 502 J67 1991 "Reaction mechanisms of inorganic and organometallic systems" Jordan, Robert B.
QD 262 O745 2002 "Organometallics in synthesis: a manual" 2nd ed. Schlosser, M.

In general, QD 411 is the call number for books on catalysis and related topics.

Encyclopedic Sources: [Electronic Resources available through the library site]
"Comprehensive Organometallic Chemistry III"
"Encyclopedia of Inorganic Chemistry" (Very highly recommended)

Supplementary Material: Additional material will be provided to the students or will be obtained from the primary literature (journal articles and communications). For example, polymerization catalyst design will be given as a hand-out to students taking the course.

What is catalysis? Catalysis forms one of the principles of green chemistry. A catalyst can improve reaction efficiency by improving selectivity for a desired product, decreasing reaction time, or facilitating a reaction at a lower temperature. Some catalysts are elegantly simple, such as in acid-catalyzed reactions where a proton source is all that is required to drive a reaction forward. Other catalysts are marvelously complex, such as enzymes. Catalysts can occupy the same state as that of the reactants (Homogeneous catalysis) or the reactants and catalyst can occupy different states (Heterogeneous catalysis). There are clear advantages and disadvantages to both. Also, where Nature has provided us with myriad examples of very efficient ways of catalyzing reactions, biocatalysis (assisted in some cases by genetic engineering) will become increasingly important in developing a sustainable future. This course will introduce catalysis as a tool for conducting chemistry with minimal environmental impact, describe the methods used for assessing catalyst activity and devising more efficient catalysts, and understanding the mechanisms of catalyzed reactions. It will survey the most well understood processes as well as some cutting edge reactions that are still not well understood. We will cover homogeneous and heterogeneous catalysis as well as some select examples of biocatalyzed reactions. Characterization methods of catalysts will be described and examples will be chosen from the primary literature for discussion in a seminar format.
I will assume students have an appropriate background that includes courses similar to our senior undergraduate inorganic chemistry (Chem 3211), spectroscopic analysis (Chem 3500) and organic chemistry (Chem 3411) courses, with the class aimed at the level of Rothenburg's textbook and online material (www.catalysisbook.org).

Course Outline:
1. Introduction/Review
   i. Green Chemistry, Atom Economy, Why is Catalysis Important?
   ii. Homogeneous vs. Heterogeneous vs. Biocatalysis
   iii. Replacing Stoichiometric Reactions with Catalytic Cycles
   iv. Tools in Catalysis Research
   v. Mechanistic Studies and Rate Laws
2. Basics of Catalysis
   i. Reaction Rates, Reaction Order, Kinetics
   ii. Zero-Order Rate Laws
   iii. First-Order Rate Laws
   iv. Second-Order Rate Laws
   v. Catalyst Deactivation
3. Homogeneous Catalysis
   i. Metal Complex Catalysis in the Liquid Phase
   ii. Elementary Steps in Homogeneous Catalysis
   iii. Classic Homogenous Catalysts
4. Heterogeneous Catalysis
   i. Classic Gas/Solid Systems
   ii. The “Active Site”
   iii. Catalyst Characterization
   iv. Liquid/Solid Systems
   v. Surface Organometallic Chemistry
   vi. Immobilized molecular catalysts
5. Biocatalysis
   i. Basics of Enzymes
   ii. Industrial Applications of Enzyme Catalysis
6. Case Studies from the primary literature

Method of Evaluation

All students will be assessed using the Evaluation Schemes given below. The key methods include:

i) Assignments – Graduate students will be assigned reading from the current literature. They will meet weekly with the instructor one-on-one or in small groups (depending on the enrollment) at scheduled times to discuss the research papers and answer questions orally, similar to debating a paper while meeting a colleague at a conference.

ii) Essay/Term paper – Graduate students will be expected to submit a paper and must demonstrate a scholarly treatment of the material with an acceptable number of references. The students will present their papers to the other students in the class and lead the discussion.

iii) Tests/Exams – The class test will assess the core material discussed in meetings and in the principle texts (Steinborn and Rothenburg). The Exam will include material relevant to the primary literature assignments and student presentations.
<table>
<thead>
<tr>
<th>Evaluation Scheme for Graduate Students</th>
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<tr>
<td>Assignments</td>
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<tr>
<td>Class Test</td>
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<td>Essay/Term Paper</td>
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<tr>
<td>Oral Presentation</td>
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<tr>
<td>Final Exam</td>
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</tbody>
</table>

Hello Gail,

these changes have been approved with 7 votes in favour (Christina, Brent, Kapil, Ratana, Todd, Karem and myself), none against. Please, table the motion for the next Council meeting.

Regards,
-j

On 11/12/2014 11:12 AM, Kenny, Gail wrote:
> Hi JC,
> 
> I have attached the calendar changes incorporated into the current calendar document for the proposed Cognitive and Behavioural Ecology calendar updates. See below the rationale for these changes. Please forward to the Graduate Studies Committee for discussion/approval. Thank you.
> 
> Gail
> 
> The Board of Study for the Cognitive and Behavioural Ecology (CABE) program has agreed that the following calendar changes be put forward for approval:
> 
> 1. The number of courses required of students in the MSc program should be reduced from four to three. The recommendation is that the three required courses should be CABE 6351, Animal Behaviour, CABE 7000, Field and Lab Methods in Behavioural Ecology, and one elective. In most cases, the elective that will be required by the supervisory committee will continue to be statistics.
> 
> This change will make the CABE MSc course requirements more similar programs in cognate areas, such as Biology, which have lower course loads. This course reduction may encourage faculty in such areas to consider supervising students in the CABE program. In addition, it was felt that many CABE students have not been able to take an elective course that is compatible with their research interests.
> 
> 2. The composition of the comprehensive examination committee should be changed to allow a maximum of two members of the student's supervisory committee to serve on this committee. Under current regulation, only the supervisor may be on both committees.
> 
> This change will allow students to have faculty members with compatible or similar research expertise to the student's thesis and comprehensive exam area sit on both committees. Currently, excluding supervisory committee members from the comprehensive exam committee has made the task of obtaining appropriate faculty for the latter committee more onerous than seems necessary.
> 
> Gail Kenny
31.6.1 Program of Study

1. The Cognitive and Behavioural Ecology Graduate Program focuses on interdisciplinary animal behaviour research. Research integrates mechanistic, developmental, evolutionary and ecological perspectives on behaviour through molecular, individual and population levels of analysis. Supervisors include faculty from the Departments of Biology, Ocean Sciences, Psychology, the Faculty of Medicine and the Environmental Science Program at Grenfell Campus, as well as adjunct faculty from the Canadian Wildlife Service, Department of Fisheries and Oceans, the Newfoundland and Labrador Forestry and Wildlife Divisions and Parks Canada. The Departments of Biology and Psychology jointly offer the Master of Science and the Doctor of Philosophy degrees in Cognitive and Behavioural Ecology.

2. The Administrative Committee is responsible for the Program. Committee members are appointed by the Dean of Science, on the recommendation of the Chair of the Committee and of the Heads of Biology and Psychology. The Committee Chair is elected by the committee members and appointed by the Dean of Science. The Committee makes recommendations to the Dean of Graduate Studies concerning admissions and academic requirements. In consultation with supervisors, recommendations are made concerning course programs, financial support, thesis committees, comprehensive and thesis topics, examiners and students' annual progress. Upon program completion, the Committee certifies that all requirements for the appropriate degree have been met. The Department of the Supervisor ensures that adequate facilities are provided for each candidate. Students in Cognitive and Behavioural Ecology are considered for teaching assistantships in the Psychology or Biology Departments.

31.6.2 Regulations

1. There are no required courses for the doctoral program. However, the Doctoral Seminar (CABE 6992) and/or other courses tailored for individual students may be included in the student's program by the Dean of Graduate Studies on the recommendation of the Chair of the Committee.

2. The comprehensive examination shall normally be taken within the first 5 semesters of the program. An Examination Committee will be struck in accordance with General Regulations. At least one member of either the Department of Biology or of the Department of Psychology (other than the Supervisor) must be on the Examination Committee, along with one other representative from among the faculty members currently associated with Cognitive and Behavioural Ecology and an additional representative from either within or outside of Cognitive and Behavioural Ecology. The candidate's Supervisor will be on the Examination Committee with a maximum of one other member from the candidate's supervisory committee permitted to serve when appropriate and will be the only examiner from the candidate's Thesis Supervisory Committee. The Examination Committee is chaired by the Chair of the Cognitive and Behavioural Ecology Committee. The examination will include a comprehensive, integrative review and critical evaluation of novel ideas with regard to a topic in Animal Behaviour or Behavioural Ecology. The review topic is assigned by the Examination Committee, which also determines the submission date for the paper, and the date of the examination. Normally, the student will write the paper in 10 weeks, and the oral examination will occur within two to three weeks of the paper's submission. This paper will form the basis of a public seminar. The Examination Committee will question the candidate about the paper, the topic and its broader relationship with Cognitive and Behavioural Ecology.
25.9.1 General Information

1. The Cognitive and Behavioural Ecology Program is interdisciplinary and designed to train students in research that integrates cognitive and behavioural studies at the ecological level. Molecular, developmental and evolutionary aspects of cognition and behaviour are also studies. Supervisors include faculty from the Departments of Biology, Ocean Sciences, Psychology, the Faculty of Medicine and the Environment Science Program at Grenfell Campus, as well as adjunct faculty from the Canadian Wildlife Service, Department of Fisheries and Oceans, the Newfoundland and Labrador Forestry and Wildlife Divisions and Parks Canada. The Departments of Biology and Psychology jointly offer the Master of Science and the Doctor of Philosophy degrees in Cognitive and Behavioural Ecology.

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25.9.2 Program of Study

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

2. Upon completion but before submission of the thesis, the student is required to give a formal thesis presentation.

3. The student will be required to comply with all other regulations governing the graduate Degree of Master of Science.