FACULTY OF SCIENCE
MEETING OF FACULTY
Tuesday, February 18, 2014
3:00 p.m.
Leacock Council Room - L232

Short Research Presentations
(3 minutes)

Professor Rowan Barrett, Redpath Museum
Professor Jelena Ristic, Department of Psychology

A G E N D A

1. Adoption of Agenda

2. Candidates for Degrees
   - Director (Advising Services) Nicole Allard
   a) Bachelor of Arts and Science **S-13-15 To be Tabled**
   b) Bachelor of Science **S-13-16 To be Tabled**
   c) Diploma in Environment **S-13-17 To be Tabled**
   d) Diploma in Meteorology **S-13-18 To be Tabled**

3. Minutes of December 3, 2013 **S-13-14 On Web**

4. Business Arising from the Minutes

5. Reports of Committees
   - Academic Committee - Associate Dean Laurie Hendren **S-13-19 On Web**

6. Dean's Business
   - Dean's Multidisciplinary Undergraduate Research List **S-13-20 To Be Tabled**
     Director Nicole Allard

7. Reports on Actions of Senate
   - Prof. Jacques Hurtubise: Senate Meeting of December 4, 2013
   - Prof. Gregory Dudek: Senate Meeting of January 22, 2014

8. Members' Question Period

9. Other Business

Next Meeting: March 18, 2014

S-13-14

FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, December 3, 2013
Leacock Council Room – L232

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: **S-13-12, S-13-13**

Dean Grant announced that Anna Cerrone, Faculty of Science, and Jennifer Viens, Faculty of Arts, were present to sell tickets for Centraide to win a holiday basket.

Dean Grant called the meeting to order at 3:00 p.m.

(1) ADOPTION OF AGENDA

Prof. Mucci **moved**, seconded by Prof. Gyakum, that the Agenda be adopted.

The motion carried.

(2) MINUTES OF OCTOBER 15, 2013 **S-13-12**

Ms. Curry **moved**, seconded by Prof. Mucci, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(4) REPORT OF COMMITTEE

- **Academic Committee** **S-13-13**

The Academic Committee approved the following on Tuesday, October 29, 2013 and Tuesday, November 26, 2013:

SECTION A: NEW COURSES

(1) MICROBIOLOGY & IMMUNOLOGY

MIMM 384	~~Laboratory Course in Microbiol~~ Molecular Microbiology Lab 3 credits	**AC-13-15**
MIMM 385	Laboratory Course in Immunolog 3 credits	**AC-13-16**

404.1 Associate Dean Hendren said that the above new courses, MIMM 384 and MIMM 385, were created as a result of splitting MIMM 386D1/D2 into two courses. She mentioned that the title of MIMM 384 had been changed to avoid duplication.

Associate Dean Hendren **moved**, seconded by Prof. Grütter, that the course be adopted.

The motion carried.

(2) CHEMISTRY

CHEM 332	Biological Chemistry	**AC-13-18**

3 credits

404.2 Associate Dean Hendren said that in order to maintain accreditation by the Chemical Society of Canada, a new course in biological chemistry, CHEM 332, was required for most of the Chemistry programs (relevant programs to be considered below). Students taking CHEM 332 would not be allowed to take BIOL 200 or BIOL 201.

Associate Dean Hendren **moved**, seconded by Prof. Damha, that the course be adopted.

The motion carried.

(3) Physiology

PHGY 488	Stem Cell Biology 3 credits	**AC-13-25**

404.3 Associate Dean Hendren said PHGY 488, an additional course offered to U3 students in Physiology programs, will be taught by a new professor. PHGY 488 will provide an opportunity for more choice in the programs. Students cannot obtain credit for both PHGY 488 and ANAT 416.

Associate Dean Hendren **moved**, seconded by Prof. Grütter, that the course be adopted.

The motion carried.

(4) BIOLOGY

BIOL 509	Methods in Molecular Ecology 3 credits	**AC-13-30**

404.4 Associate Dean Hendren said that BIOL 509 will be taught by a new professor, and it will allow students to become familiar with advanced methods used in molecular ecology.

Associate Dean Hendren **moved**, seconded by Prof. Brown, that the course be adopted.

The motion carried.

(5) GEOGRAPHY

GEOG 325	New Master-Planned Cities 3 credits	**AC-13-32**

404.5 Associate Dean Hendren said that GEOG 325 is a new course to be taught by a new faculty member.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

GEOG 489	Independent Research in Geog 3 credits	**AC-13-33**

404.6 GEOG 489 is a new course created in response to the need to clearly identify research courses and reading courses. GEOG 489 will qualify as a research course for the Dean's Multidisciplinary Undergraduate Research List (DMURL). GEOG 490, currently both research and reading, will be modified later on in the meeting.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

GEOG 512	Adv quant meth in soc fld rsch 3 credits	**AC-13-35**

404.7 Associate Dean Hendren said that GEOG 512 is one of the many quantitative-methods courses proposed by different units.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

GEOG 520	Agric., Envir.,& Food Security 3 credits	**AC-13-36**

404.8 GEOG 520 is a new course on food security, and the first such course to be given on the downtown campus.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

GEOG 525	Asian Cities in the 21st C 3 credits	**AC-13-37**

404.9 GEOG 525 will be taught by a new faculty member, also teaching the newly approved course (above) GEOG 325.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

(6) PHARMACOLOGY & THERAPEUTICS

PHAR 598	Honours Pharma Research Proj. 6 credits	**AC-13-38**

404.10 Associate Dean Hendren said that PHAR 598 is being created as an Honours-specific research project course.

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the course be adopted.

The motion carried.

(7) EARTH & PLANETARY SCIENCES

EPSC 460	Independent Reading Project 3 credits	**AC-13-40**

404.11 EPSC 460 is being created to replace the reading component of the recently revised course, EPSC 482 (approved at the Faculty meeting of October 15, 2013).

Associate Dean Hendren **moved**, seconded by Prof. Mucci, that the course be adopted.

The motion carried.

EPSC 513	Climate and the Carbon Cycle 3 credits	**AC-13-43**

404.12 EPSC 513, a new course dealing with climate and the carbon cycle, will be taught from a geological perspective.

Associate Dean Hendren **moved**, seconded by Prof. Mucci, that the course be adopted.

The motion carried.

(8) COMPUTER SCIENCE

COMP 307	Principles of Web Development 2 credits	**AC-13-44**

404.13 Associate Dean Hendren said that this is the first course dealing with this topic.

Associate Dean Hendren **moved**, seconded by Prof. Chang, that the course be adopted.

The motion carried.

SECTION B: COURSE CHANGES

(1) MICROBIOLOGY & IMMUNOLOGY

MIMM 386 D1/D2	Lab in Microbiology&Immunology Course Retirement 6 credits	**AC-13-17**

Associate Dean Hendren **moved**, seconded by Mr. Ng, that the course be retired.

The motion carried.

(2) GEOGRAPHY

GEOG 315	Urban Transportation Geography Course Description 3 credits	**AC-13-31**

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the changes be approved.

The motion carried.

GEOG 490	Independent Readings in Geog Title, Description, Prerequisites, Calendar Information 3 credits	**AC-13-34**

Associate Dean Hendren **moved**, seconded by Prof. Moore, that the changes be approved.

The motion carried.

(3) EARTH & PLANETARY SCIENCES

EPSC 470	Undergraduate Thesis Research Description, Calendar Information 6 credits	**AC-13-41**

Associate Dean Hendren **moved**, seconded by Prof. Mucci, that the changes be approved.

The motion carried.

EPSC 480	Honours Research Thesis Description, Calendar Information 6 credits	**AC-13-42**

Associate Dean Hendren **moved**, seconded by Prof. Mucci, that the changes be approved.

The motion carried.

(4) COMPUTER SCIENCE

COMP 601	Thesis Literature Review Credit Weight, Title, Description 2 credits	**AC-13-45**

Associate Dean Hendren **moved**, seconded by Prof. Chang, that the changes be approved.

The motion carried.

COMP 698	Thesis Research 4 Credit Weight 10 credits	**AC-13-46**
COMP 699	Thesis Research 5 Credit Weight 12 credits	**AC-13-47**

Associate Dean Hendren **moved**, seconded by Prof. Chang, that the above changes be approved.

The motion carried.

SECTION C: NEW PROGRAMS

None

SECTION D: PROGRAM CHANGES

(1) McGILL SCHOOL OF ENVIRONMENT

B.Sc. Environment Program:

- Atmospheric Environment & Air Quality domain **AC-13-14**

404.14 A required course had been retired, thus decreasing the domain-required credits, and as a result, the complementary course credits have been increased by three. Additional Complementary Courses have been added to the domain.

Associate Dean Hendren **moved**, seconded by Mr. Barry, that the changes be approved.

The motion carried.

(2) CHEMISTRY

- Honours in Chemistry **AC-13-19**
- Honours in Chemistry – Atmosphere and Environment Option **AC-13-20**
- Honours in Chemistry – Materials Option **AC-13-21**

404.15 The above Chemistry Honours Programs were being revised due to the creation of the new course, CHEM 332, in order to maintain accreditation. The required course credits have increased by three, but the complementary course credits have been reduced by three, so the total credit weight of the programs will not change.

Associate Dean Hendren **moved**, seconded by Prof. Damha, that the changes be approved.

The motion carried.

- Major in Chemistry	**AC-13-22**
- Major in Chemistry – Atmosphere and Environment Option	**AC-13-23**
- Major in Chemistry - Materials Option	**AC-13-24**

404.16 Associate Dean Hendren said the Major Program in Chemistry is currently a total of 59 credits: 53 required credits and 6 complementary credits. By introducing a new required course, CHEM 332 (approved above), there are now only 3 credits of complementary courses, and there is no requirement for taking these courses at the 400-level and above. After some discussion at Academic Committee meetings, it was agreed that the Department of Chemistry should examine its Major programs with regard to requiring 400/500-level courses. However, because of the accreditation issue, the current program changes should be moved forward on the approval path.

404.17 Associate Dean Hendren said that it had been agreed that the Department of Chemistry would either justify why 400-level or higher courses can't be included in the program, or better still, devise a way to introduce 400- and 500-level courses in the program.

404.18 The changes to the Major in Chemistry – Atmosphere and Environment Option, and the Major in Chemistry - Materials Option, were similar in terms of reducing the number of credits of complementary courses.

Associate Dean Hendren **moved**, seconded by Prof. Damha, that the changes be approved.

The motion carried.

(3) PHARMACOLOGY & THERAPEUTICS

Honours Program in Pharmacology	**AC-13-39**

Associate Dean Hendren **moved**, seconded by Mr. Krett, that the changes be approved.

The motion carried.

(4) COMPUTER SCIENCE

M.Sc. Program in Computer Science	**AC-13-48**

Associate Dean Hendren **moved**, seconded by Prof. Dudek, that the changes be approved.

The motion carried.

(5) ANATOMY & CELL BIOLOGY

- Honours Program in Anatomy & Cell Biology	**AC-13-49**
- Major Program in Anatomy & Cell Biology	**AC-13-50**

Associate Dean Hendren **moved**, seconded by Prof. Grütter, that the changes be approved.

The motion carried.

SECTION E: OTHER (For Information)

- Feedback for Teaching and Learning Services

404.19 Associate Dean Hendren said she had been asked to provide feedback to Teaching and Learning Services about general concerns regarding teaching. The issue had been discussed at an Academic Committee meeting, and now she would like Faculty members' comments. One issue that had been raised at the Academic Committee meeting was the shortage of rooms for mid-term exams, and the shortage of lecture rooms in general.

404.20 Dean Grant said he was concerned about teaching students how to study. At the Academic Committee meeting, a member had brought up the possibility of students having the option before graduation of learning in the context of small groups.

404.21 Dean Grant asked members whether they thought there should be a concerted effort to obtain better rooms for mid-term exams and to organize them better. A particular problem was accommodating large classes for mid-term exams. A possible solution might be to see if the gym could be made available during one week in the middle of the semester. Members agreed that it would be a good idea for the Dean, the Associate Dean (Academic) and the Director (Advising Services) to move forward on this.

404.22 Points raised by members included:

- A defined time period for mid-term exams may not be appropriate for every student and every course. It was noted that there are more rooms vacant on Fridays.
- Within any course there are students at various levels with various conflicts, including big assignments.
- The problem is most severe for courses with very large numbers of students.
- Mid-term exams could be held during the weekends. Some members thought this was possible; others did not.
- Weekends should be left for studying.
- It would be problematic to book all large exams during the same week.
- Having multiple exams in one day would be problematic.
- Mid-terms should be held prior to the Withdrawal deadline in order for students to obtain feedback.

Dean Grant thanked members for their comments.

(5) DEAN'S BUSINESS

There was no Dean's business.

(6) REPORT ON ACTIONS OF SENATE

Please note that the entire Minutes of Senate are available on the Web at https://www.mcgill.ca/senate/senate-2013-2014/senate-meeting-documents-2013-2014

Senate meeting of September 18, 2013 will be reported by Prof. Graham Bell at the next Faculty of Science meeting.

Senate Meeting of October 16, 2013 – Prof. Gregory Dudek

Joint Senate-Board Meeting of November 12, 2013 – Prof. Peter Grütter

Topic: Mental Health

The Principal welcomed attendees explaining that mental health is one of the most important factors affecting the success of our students, staff, faculty and the entire McGill community.

Lynne McVey (CEO Douglas Mental Health Univ. Inst.) gave an interesting presentation on how the University learning environment can help. She pointed out the stigmatization of mental health issues: would you hire a grad student who has a gap in her CV due to a) being a cancer survivor or b) having had mental health problems, such as depressions.

Mental illness is a biological and genetic disease, an illness like any other. 'Depression is a flaw in chemistry, not character'. However, 46% of academics believe that mental illness is used as an excuse for poor behavior.

We need to make bigger efforts in de-stigmatizing mental health issues. A broad social movement is needed, analogous to breast cancer movement (50 years ago breast cancer was stigmatized, now we all wear pink ribbons and run for the cause). We need more than an awareness initiative at every level of society. http://Rightbyyou.ca is an initiative to get government to fund prevention – suicide is the #1 cause of non-accidental death among youth in Canada: 173,000 will try to take their own lives every year; every year we lose more than 750 Canadians to suicide.

Roundtable discussions based on hypothetical case studies. Questions that we had to ask ourselves were: What is wellbeing in a university? How can McGill address a particular situation (case study example)? What are we missing? What could have been done? What can we do to improve the environment? How can we create a healthy environment for faculty and students?

The Deputy-Provost (Student Life and Learning) concluded with the statement that we will be considering possible follow-up coming out of the discussion.

406.1 Dean Grant said that he felt very strongly that getting treatment as soon as possible was extremely important. He encouraged everyone to be on the alert for anyone who might be having problems. For faculty and staff, the Employee Assistance Program was available; students should contact the Office of the Dean of Students. Students could also contact the chairs/directors of departments, Director (Advising Services) Nicole Allard and Associate Dean (Academic) Laurie Hendren.

406.2 Director Allard said that she serves on the Mental Health Working Group and that recommendations would be coming soon.

406.3 A member mentioned that due to cutbacks in Student Services, resources have been reduced.

406.4 Another member emphasized that the mentor program was very effective. He said that the most stressful time was not actually the first year, but rather the transition from first to second year, when students could no longer live in student residences.

Senate Meeting of November 20, 2013 – Prof. David Harpp

There were 86 Senators to hear the Chair at the beginning of a nearly 3.5 hour meeting---reflect on the following meetings, which she attended for the first time as McGill Principal:

the American Association of Universities (AAU), the Association of Universities and Colleges of Canada (AUCC) and the U15. The first saw serious funding challenges. The AUCC meeting focused on mechanisms to attract skilled immigrants to Canada, including international students. The U15 meeting concentrated on ways to increase the global competitiveness of Canadian universities and discussion on a proposal for consideration by the federal government in budget 2014.

She called on the Deputy-Provost (Student Life and Learning), Professor Ollivier Dyens, to provide an update on McGill's response to an off-campus incident concerning sexual assault involving three students.

Questions and Motions by Members

1. & 2. Question Regarding Class Scheduling Parameters

Senator Moore asked questions about class scheduling that determines not only the use of classrooms at McGill but also when faculty members will teach. **Why has the university chosen to solve a classroom access problem by impinging on the freedom of faculty to organize their time around research, and will it not create a bigger problem among the professoriate than the one it is meant to solve?**

Later, Senator Lu asked a five part question:

In combining the responses to both questions, the Deputy-Provost answered Senator Moore's question as follows:

There seems to be a misconception that the introduction of the Class Scheduling Parameters serves solely to resolve the challenges that Enrolment Services encounters when scheduling classes. The issues that have surfaced over the last three years probably existed earlier, but were not widely apparent because of the siloed manner in which class scheduling occurred. These are:

- Inequity among instructors – Some instructors have complained about unfairness because their classes are routinely relegated to the margins of the day and week and have suggested that this is, in part, due to unreasonable requests for teaching block offs by other colleagues. Examples communicated to Enrolment Services include blocking off all Mondays and Fridays, or blocking off all mornings or all afternoons because a colleague lives out of town. Cultures vary across departments regarding the way these conflicts are resolved.

Senator Moore asked Senator Dyens if a top-down approach was the best manner to solve class scheduling issues. Senator Dyens replied that the current system is the most ideal way to do so.

Senator Lu said the vast majority of units blocked off at least 10 hours per week, which appeared reasonable to her since professors are available to teach for the vast majority of the week. Ms. Massey replied that 24 departments blocked off an average of at least 14 hours per week, while 9 departments blocked off an average of 20 hours or more per week.

The Provost added that campus-wide scheduling, in part, results from the provincial government's requirement that 70% of classes be filled to 70% capacity. The Quebec government implemented this rule to ensure that universities were using their existing spaces efficiently.

Given the level of discussion, the Chair suggested that Senate could hold an open discussion on this topic if it so wished.

Colleagues are recommended to the minutes of Senate for a full discussion. **The answers were extremely long and detailed and did not really solve the question other than to acknowledge that Senator Moore had indeed carried out due diligence in his duties as Chair**

Question Regarding Employment Equity

What progress has been made in meeting the goals set out in the Employment Equity Plan following the Federal Contractors Program 2010 compliance review?

Senator White answered with much detail as well as to the question asked by another Senator. Colleagues are referred to the minutes for the answers.

It was noted that the SEDE office is facing a significant cut to its budget and has an ambiguous place in the University's structure. She then asked a question which the Chair requested be submitted at the next Senate meeting.

1. Open Discussion: Charter of Quebec Values

The Chair initiated the discussion by reminding Senate that in September, as part of the consultation on the proposed Charter of Values. Senator Jutras proposed simplifying the University's protest statement and it was adopted as follows:

Be it resolved that while the McGill Senate supports the secular spirit of Bill 60, it strongly objects to the restrictions on the right to wear religious symbols, as described in the draft legislation, which run contrary to the University's mission and values.

2. Key Performance Indicators

Dr. Pierre Moreau, Executive Director (Planning and Institutional Analysis), presented this item for Senate's information.

4. 450th Report of the Academic Policy Committee

The Provost delivered this report for Senate's approval and focused his presentation on the proposed Policy on Research Centres.

Be it resolved that Senate approve the proposed Policy on Research Centres for further recommendation to the Board of Governors for final approval.

5. Report of the Nominating Committee

With regard to the proposed revisions to the terms of reference of the Steering Committee, Senators discussed the addition of a Dean, to be appointed by the Provost, on the Steering Committee. Some Senators proposed removing this addition from the Steering Committee's terms of reference. The Provost clarified that the Nominating Committee had considered this very carefully and decided that since a majority of members on the Steering Committee are elected, including an ex officio position on the Committee for a Dean would not disrupt the Committee's balance and would provide a Faculty-perspective view on the Steering Committee.

Senate approved the revised terms of reference for the Senate Nominating and Senate Steering Committees, as recommended in the Report of the Senate Nominating Committee

Senate approved the terms of reference for an Ad Hoc Committee to Review the Livestreaming of Senate Meetings as contained in the Report of the Senate Nominating Committee

6. Annual Report from the Senate Committee on Physical Development
Mr. Robert Couvrette, Associate Vice-Principal (University Services) delivered this presentation for Senate's information. The fire at Macdonald was discussed along with universal design along with comments about bicycle gates at the Milton Gates. It should be noted that these have been removed.

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7. Annual Report from the Committee on Enrolment and Student Affairs
Senator Dyens presented this report for Senate's information. There were no questions.

8. Annual Report of the Committee on Student Discipline
Senator Costopoulos delivered this report for Senate's information. He mentioned that the Office of the Dean of Students is open to suggestions of how granular the report should be without compromising students' identities.

9. Report of the Board of Governors to Senate
The Secretary-General, presented this report on behalf of Senator Price for Senate's information.

10. Report of the Joint Board-Senate Meeting
The Secretary-General delivered this report for Senate's information, highlighting the high turnout for, and stimulating discussion at, the event.

(7) MEMBERS' QUESTION PERIOD

There were no members' questions.

(8) OTHER BUSINESS

408.1 Dean Grant reminded members about the upcoming Faculty of Science Christmas party, to be held on December 12, 2013 at 4:00 p.m. in Thomson House. He said that Santa Claus would be at the party, and mentioned that there were many young professors with small children. Dean Grant encouraged everyone to come to the party.

There being no further business, the meeting adjourned at 4:05 p.m.

S-13-19

FACULTY OF SCIENCE ACADEMIC COMMITTEE

Report to Faculty of Science Meeting of February 18, 2014

The Academic Committee approved the following on Tuesday, January 28, 2014:

COURSE CHANGES

1.	Chemistry		
	CHEM 493	Adv Phys Chem Lab Renumbered from [-393]; title, description, pre/co-requisite, restriction 3 credits	**AC-13-52**
2.	Computer Science		
	COMP 691	Thesis Research 1 Credit weight change from 2 credits 3 credits	**AC-13-53**

PROGRAM CHANGES

1.	Computer Science	
	- M.Sc. in Computer Science	**AC-13-54**
	- M.Sc. in Computer Science - Bioinformatics Option	**AC-13-55**
	- M. Sc. in Computer Science - Computational Science and Engineering Option	**AC-13-56**
2.	Biology	
	- Honours in Biology	**AC-13-57**
	Program Retirement	
	- Ph.D. in Biology - Developmental Biology	**AC-13-58**

OTHER (For Information)

-	Feedback on Proposed Revisions on Policy on Course Evaluations (Also sent to Chairs/Directors)	**AC-13-59**

Course Number Change for CHEM 393

Proposal Reference Number	: 8068
PRN Alias	: 13-14#1481
Version No	: 3
Submitted By	: Dr Amy Blum
Edited By	: Miss Malek Yalaoui

Display Printable PDF

Summary of Changes	Subject/Course/Term, Course Title, Course Description, Prerequisites, Corequisites, Restrictions

	Current Data	New Data
Program Affected?		Y
Program Change Form Submitted?		N (Simple Change) - Please replace CHEM 393 with CHEM 493 as a required course for all programs: Liberal Program - Core Science Component Chemistry - Physical (47 credits) Physical Option Courses (21 credits) Major Chemistry (59 credits) Required Courses (53 credits) Major Chemistry - Materials (62 credits) Required Courses (59 credits) Major Chemistry - Atmosphere and Environment (63 credits) Required Courses (54 credits) Major Chemistry - Bio-organic (63 credits) Required Courses (60 credits) Honours Chemistry (71 credits) Required Courses (53 credits) Honours Chemistry - Materials (74 credits) Required Courses (65 credits) Honours Chemistry - Atmosphere and Environment (75 credits) Required Courses (60 credits) Honours Chemistry - Bio-organic (75 credits) Required Courses (57 credits) Honours Physics and Chemistry (80 credits) U3 Required Courses (14 credits)
Subject/Course/Term	CHEM 393 • one term	CHEM 493 • one term
Credit Weight or CEU's	2 credits.	2 credits
Course Activities	• LW - Laboratory	Schedule Type: Hours Per Week LW - Laboratory: 4 Total Hours per Week : 4 Total Number of Weeks : 13
Course Title	Course Title on Transcript: Physical Chem Lab 2 Course Title on Calendar: Physical Chemistry Laboratory 2.	Course Title on Transcript: Adv Phys Chem Lab Course Title on Calendar: Advanced Physical Chemistry Laboratory
Rationale		In the years since we moved into our renovated lab space and updated our infrastructure we have made significant changes to the content of CHEM 393. Historically this course included some experiments involving materials characterization (viscosity, static light scattering, polarizability) which has been moved to the second year labs. With new equipment and the increasing importance

		of spectroscopic techniques in all areas of research the course has evolved in the last three years to include a more thorough exploration of vibrational/electronic coupling, the relationship of T1/T2 in NMR spectroscopy, a comparison of Raman and IR measurements, and time-correlated single photon counting as a method of investigation for fluorescent nanomaterials. This has increased the need for CHEM 345 to be a true pre-requisite, with CHEM 355 minimally as a co-requisite. Additional experiments that are in process of preparation include phosphorescence in solids and liquids, pump-probe spectroscopy, and Raman microscopy.
Responsible Instructor		
Course Description	Selected experiments to illustrate physico-chemical principles more advanced than those of CHEM 363, CHEM 253 and CHEM 263.	Selected experiments to illustrate physico-chemical principles more advanced than those of CHEM 253 and CHEM 263.
Teaching Dept.	0287 : Chemistry	0287 : Chemistry
Administering Faculty/Unit	SC : Faculty of Science	SC : Faculty of Science
Prerequisites	Prerequisite: CHEM 253 and CHEM 263 or CHEM 363 or permission of instructor.	Prerequisite: CHEM 253, CHEM 263 and CHEM 345 or permission of instructor. Web Registration Blocked? : Y Minimum Grade or Test Scores : C Prereq course or test taken at the same time? : N
Corequisites		CHEM 355 Web Registration Blocked? : N
Restrictions		Not open to students who are taking or have taken CHEM 393.
Supplementary Calendar Info	1. Fall, Winter 2. Each lab section has limited enrolment. 3. It is strongly recommended that students take CHEM 345 prior to CHEM 393.	1. Fall, Winter 2. Each lab section has limited enrolment.
Additional Course Charges		
Campus		Downtown
Projected Enrollment		
Requires Resources Not Currently Available		N
Explanation for Required Resources		
Consultation Reports		

Attached?		
Effective Term of Implementation		201409
File Attachments		No attachments have been saved yet.
To be completed by the Faculty		
For Continuing Studies Use		

Approvals Summary

Show all comments

Version No.	Departmental Curriculum Committee	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP	Version Status
3								Approved by Department Meeting Edited by: Malek Yalaoui on: Jan 24 2014
2								Approved by Department Meeting Edited by: Malek Yalaoui on: Jan 15 2014
1	Approved Amy Blum Meeting Date: Dec 10 2013 Approval Date: Jan 14 2014 View Comments	Approved Amy Blum Meeting Date: Dec 12 2013 Approval Date: Jan 14 2014 View Comments						Approved by Department Meeting Created on: Jan 14 2014

Revision for COMP 691

Proposal Reference Number	: 8009
PRN Alias	: 13-14#1422
Version No	: 3
Submitted By	: Prof Bettina Kemme
Edited By	: Miss Malek Yalaoui

Display Printable PDF

Summary of Changes | Credit Weight or CEU's

	Current Data	New Data
Program Affected?		Y
Program Change Form Submitted?		Y
Subject/Course/Term	COMP 691 • one term	
Credit Weight or CEU's	2 credits.	3 credits
Course Activities	• U - Thesis Course	
Course Title	Course Title on Transcript: Thesis Research 1 Course Title on Calendar: Thesis Research 1.	
Rationale		As a required literature review course is added to the required thesis courses, the credit weights of some of the existing thesis research courses have to be adjusted to fulfill the requirement of 24 credits of thesis courses.
Responsible Instructor		
Course Description	Ongoing research pertaining to thesis.	
Teaching Dept.	0155 : Computer Science	
Administering Faculty/Unit	GR : Graduate Studies	
Prerequisites		
Corequisites		
Restrictions	• Restriction: Computer Science students	
Supplementary Calendar Info		
Additional Course Charges		
Campus		
Projected Enrollment		
Requires Resources Not		

Currently Available		
Explanation for Required Resources		
Consultation Reports Attached?		
Effective Term of Implementation		201409
File Attachments		No attachments have been saved yet.
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3								Submitted to Faculty Meeting for approval Edited by: Malek Yalaoui on: Jan 24 2014
2								Submitted to Faculty Meeting for approval Edited by: Malek Yalaoui on: Jan 24 2014
1								Submitted to Faculty Meeting for approval Created on: Dec 17 2013

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

M.Sc.

1.1 Major (Legacy= Subject) (30-char. max.)

Computer Science

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category

Faculty Program (FP)	Honours (HON)
Major	Joint Honours Component (HC)
Joint Major	Internship/Co-op
Major Concentration (CON)	X Thesis (T)
Minor	Non-Thesis (N)
Minor Concentration (CON)	Other
	Please specify

1.5 **M.Sc. Program in Computer Science**

2.0 Administering Faculty/Unit

Graduate Studies

Offering Faculty/Department

Faculty of Science / Computer Science

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: **201409**

4.0 Existing Credit Weight **45**

Proposed Credit Weight **45**

5.0 Rationale for revised program

In order that students conduct a broad research review instead of focussing simply on their specific M.Sc. topic, COMP 601, Thesis Literature Review, 2 credits is being re-instated into the M.Sc. program.

The addition of COMP 601, required the adjustment of COMP 691, Thesis Research 1, from 2 credits to 3 credits to fulfill the requirements of 24 credits of thesis courses.

This Program Revision Form takes account of the above changes, and as well the recently approved changes in credit weight of COMP 601, COMP 698 and COMP 699.

6.0 Revised Program Description (Maximum 150 words)

No change from what is currently written in the graduate calendar.

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses,	Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required
M.Sc. in Computer Science (45 credits) **Program Requirements** **Thesis Courses (24 credits)** 24 credits selected from • COMP 691 Thesis Research 1 (~~2~~ credits) • COMP 696 Thesis Research 2 (3 credits) • COMP 697 Thesis Research 3 (4 credits) • COMP 698 Thesis Research 4 (9 credits) • COMP 699 Thesis Research 5 (15 credits) **Complementary Courses (21 credits)** At least 21 credits of 500-, 600-, or 700-level COMP courses, including at least 12 credits of 4-credit courses. Note: Students with an appropriate background can substitute 3 credits by COMP 696 and 4 credits by COMP 697.	**M.Sc. in Computer Science (45 credits)** **Program Requirements** **Required Thesis Courses (24 credits)** **COMP 601 Thesis Literature Review (2 credits)** The remaining 22 credits selected from: • **COMP 691 Thesis Research 1 (3 credits)** • COMP 696 Thesis Research 2 (3 credits) • COMP 697 Thesis Research 3 (4 credits) • COMP 698 Thesis Research 4 (10 credits) • COMP 699 Thesis Research 5 (12 credits) **Complementary Courses (21 credits)** At least 21 credits of 500-, 600-, or 700-level COMP courses, including at least 12 credits of 4-credit courses. Note: Students with an appropriate background can substitute 3 credits by COMP 696 and 4 credits by COMP 697.

Attach extra page(s) as needed

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

Master of Science (M.Sc.)

1.1 Major (Legacy= Subject) (30-char. max.)

Computer Science

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

Bioinformatics

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category

Faculty Program (FP)	Honours (HON)
Major	Joint Honours Component (HC)
Joint Major	Internship/Co-op
Major Concentration (CON)	X Thesis (T)
Minor	Non-Thesis (N)
Minor Concentration (CON)	Other
	Please specify

1.5 **Master of Science (M.Sc.); Computer Science (Thesis) — Bioinformatics Option (45 credits)**

2.0 Administering Faculty/Unit

Graduate Studies

Offering Faculty/Department

Faculty of Science / Computer Science

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: **201409**

4.0 Existing Credit Weight **45**

Proposed Credit Weight **45**

5.0 Rationale for revised program

In order that students conduct a broad research review instead of focussing simply on their specific M.Sc. topic, COMP 601, Thesis Literature Review, 2 credits is being re-instated into the M.Sc. program.

The addition of COMP 601, required the adjustment of COMP 691, Thesis Research 1, from 2 credits to 3 credits to fulfill the requirements of 24 credits of thesis courses.

This Program Revision Form takes account of the above changes, and as well the recently approved changes in credit weight of COMP 691, COMP 698 and COMP 699 (which were also performed to keep with the 24 credit requirement for thesis courses)

6.0 Revised Program Description (Maximum 150 words)

No change from what is currently written in the graduate calendar.

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num,

M.Sc. in Computer Science (Thesis) – Bioinformatics (45 credits)

Program Requirements

Thesis Courses (24 credits)

~~24~~ credits selected from

- COMP 691 Thesis Research 1 (~~2~~ credits)
- COMP 696 Thesis Research 2 (3 credits)
- COMP 697 Thesis Research 3 (4 credits)
- COMP 698 Thesis Research 4 (~~9~~ credits)
- COMP 699 Thesis Research 5 (~~15~~ credits)

Required Courses (3 credits)

- COMP 616D1 Bioinformatics Seminar (1.5 credits)
- COMP 616D2 Bioinformatics Seminar (1.5 credits)

Complementary Courses (18 credits)

6 credits chosen from the following courses:

- BINF 621 Bioinformatics: Molecular Biology (3 credits)
- BMDE 652 Bioinformatics: Proteomics (3 credits)
- BTEC 555 Structural Bioinformatics (3 credits)
- COMP 618 Bioinformatics: Functional Genomics (3 credits)
- PHGY 603 Systems Biology and Biophysics (3 credits)

12 credits of 4-credit courses chosen from 500-, 600-, or 700-level Computer Science courses in consultation with the candidate's supervisor.

Note: Students with an appropriate background can substitute 4 credits by COMP 697.

Proposed program (list courses as follows: Subj Code/Crse

M.Sc. in Computer Science (Thesis) – Bioinformatics Option (45 credits)

Program Requirements

Required Thesis Courses (24 credits)

COMP 601 Thesis Literature Review (2 credits)

The remaining 22 credits selected from:

- **COMP 691 Thesis Research 1 (3 credits)**
- COMP 696 Thesis Research 2 (3 credits)
- COMP 697 Thesis Research 3 (4 credits)
- COMP 698 Thesis Research 4 (10 credits)
- COMP 699 Thesis Research 5 (12 credits)

Required Courses (3 credits)

- COMP 616D1 Bioinformatics Seminar (1.5 credits)
- COMP 616D2 Bioinformatics Seminar (1.5 credits)

Complementary Courses (18 credits)

6 credits chosen from the following courses:

- BINF 621 Bioinformatics: Molecular Biology (3 credits)
- BMDE 652 Bioinformatics: Proteomics (3 credits)
- BTEC 555 Structural Bioinformatics (3 credits)
- COMP 618 Bioinformatics: Functional Genomics (3 credits)
- PHGY 603 Systems Biology and Biophysics (3 credits)

12 credits of 4-credit courses chosen from 500-, 600-, or 700-level Computer Science courses in consultation with the candidate's supervisor.

Note: Students with an appropriate background can substitute 4 credits by COMP 697.

Attach extra page(s) as needed

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

Master of Science (M.Sc.)

1.1 Major (Legacy= Subject) (30-char. max.)

Computer Science

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

Computational Science and Engineering

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category

Faculty Program (FP)	Honours (HON)
Major	Joint Honours Component (HC)
Joint Major	Internship/Co-op
Major Concentration (CON)	X Thesis (T)
Minor	Non-Thesis (N)
Minor Concentration (CON)	Other
	Please specify

1.5 **Master of Science (M.Sc.); Computer Science (Thesis) — Computational Science and Engineering (45 credits)**

2.0 Administering Faculty/Unit

Graduate Studies

Offering Faculty/Department

Faculty of Science / Computer Science

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: **201409**

4.0 Existing Credit Weight **46**

Proposed Credit Weight **45**

5.0 Rationale for revised program

In order that students conduct a broad research review instead of focussing simply on their specific M.Sc. topic, COMP 601, Thesis Literature Review, 2 credits is being re-instated into the M.Sc. program.

The addition of COMP 601, required the adjustment of COMP 691, Thesis Research 1, from 2 credits to 3 credits to fulfill the requirements of 24 credits of thesis courses.

This Program Revision Form takes account of the above changes, and as well the recently approved changes in credit weight of COMP 691, COMP 698 and COMP 699 (which were also performed to keep with the 24 credit requirement for thesis courses)

6.0 Revised Program Description (Maximum 150 words)

No change from what is currently written in the graduate calendar.

7.0 List of existing program and proposed program

M.Sc. in Computer Science - Computational Science and Engineering Option

Program Requirements

Thesis Courses (24 credits)

~~24~~ credits selected from

- COMP 691 Thesis Research 1 (~~2~~ credits)
- COMP 696 Thesis Research 2 (3 credits)
- COMP 697 Thesis Research 3 (4 credits)
- COMP 698 Thesis Research 4 (~~9~~ credits)
- COMP 699 Thesis Research 5 (~~15~~ credits)

Required Courses

One credit selected as follow:

- COMP 669D1 Computational Science Engineering Seminar (0.5 credits)
- COMP 669D2 Computational Science Engineering Seminar (0.5 credits)

Complementary Courses

(minimum ~~21~~ credits)

Two courses from List A, two courses from List B, and the remaining credits to be chosen from graduate (500-, 600-, or 700-level) courses in the School of Computer Science. Two complementary courses must be taken outside the School of Computer Science.

Note: Students with an appropriate background can substitute 3 credits by COMP 696 and 4 credits by COMP 697, but still need to take 6-8 credits from List A and 6-8 credits from List B.

List A: Scientific Computing Courses:

- CIVE 602 Finite Element Analysis (4 credits)
- COMP 522 Modelling and Simulation (4 credits)
- … long list that remains unchanged

List B: Application and Specialized Methods Courses:

- ATOC 512 Atmospheric and Oceanic Dynamics (3 credits)
- ATOC 513 Waves and Stability (3 credits)
- ATOC 515 Turbulence in Atmosphere and Oceans (3 credits)

- … long list that remains unchanged

M.Sc. in Computer Science - Computational Science and Engineering Option

Program Requirements

Required Thesis Courses (24 credits)

COMP 601 Thesis Literature Review (2 credits)

The remaining 22 credits selected from:

- **COMP 691 Thesis Research 1 (3 credits)**
- COMP 696 Thesis Research 2 (3 credits)
- COMP 697 Thesis Research 3 (4 credits)
- COMP 698 Thesis Research 4 (10 credits)
- COMP 699 Thesis Research 5 (12 credits)

Required Courses (1 credit)

One credit selected as follow:

- COMP 669D1 Computational Science Engineering Seminar (0.5 credits)
- COMP 669D2 Computational Science Engineering Seminar (0.5 credits)

Complementary Courses

(minimum 20 credits)

At least 6 courses whereby at least two courses must be from List A, at least two courses must be from List B, and the remaining credits can be chosen from graduate (500-, 600-, or 700-level) courses in the School of Computer Science. Two complementary courses must be taken outside the School of Computer Science.

Note: Students with an appropriate background can substitute 3 credits by COMP 696 and 4 credits by COMP 697, but still need to take 6-8 credits from List A and 6-8 credits from List B.

List A: Scientific Computing Courses:

- CIVE 602 Finite Element Analysis (4 credits)
- COMP 522 Modelling and Simulation (4 credits)
- … long list that remains unchanged
-

List B: Application and Specialized Methods Courses:

- ATOC 512 Atmospheric and Oceanic Dynamics (3 credits)
- ATOC 513 Waves and Stability (3 credits)
- ATOC 515 Turbulence in Atmosphere and Oceans (3 credits)

- … long list that remains unchanged

Attach extra page(s) as needed

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

1.1 **B.Sc.**

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

Biology

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category

Faculty Program (FP)	Honours (HON) **X**
Major	Joint Honours Component (HC)
Joint Major	Internship/Co-op
Major Concentration (CON)	Thesis (T)
Minor	Non-Thesis (N)
Minor Concentration (CON)	Other
	Please specify

1.5 **B.Sc., Honours in Biology**

2.0 Administering Faculty/Unit

Faculty of Science

Offering Faculty/Department

Science/Biology

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: **201409**

4.0 Existing Credit Weight **71-75**

Proposed Credit Weight **71-72**

5.0 Rationale for revised program

Clarification of the minimum and maximum number of credits, and addition of the First Class Honours requirements.

6.0 Revised Program Description (Maximum 150 words)

Students may complete this program with a minimum of 71 credits or a maximum of 72 credits.

The Honours program in Biology is designed expressly as a preparation for graduate studies and research, and provides students with an enriched training in biology and some research experience in a chosen area. Acceptance into the Honours program at the end of U2 requires a CGPA of 3.50 and approval of a 9- or 12-credit Independent Studies proposal (see listing of BIOL 479 and BIOL 480 for details). Students also complete a 4-credit Honours Seminar course, BIOL 499. For an Honours degree, a minimum CGPA of 3.50 in the U3 year and adherence to the program as outlined below are the additional requirements.

First Class Honours will be awarded to students graduating with a GPA of 3.75 or better, and having successfully completed the Honours program.

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses,

Honours in Biology
U1 Required courses (18 credits):

BIOL 200 (3) Molecular Biology
BIOL 201 (3) Cell Biology and Metabolism
BIOL 202 (3) Basic Genetics
BIOL 205 (3) Biology of Organisms
BIOL 206 (3) Methods in Biology of Organisms
BIOL 215 (3) Introduction to Ecology and Evolution

U1 Complementary Course (4 credits)

* Students who have already taken CHEM 212 or its equivalent will choose another appropriate complementary course, to be approved by the Adviser.

CHEM 212*(4) Introductory Organic Chemistry 1

U2 or 3 Required courses (7 credits):

BIOL 301 (4) Cell and Molecular Laboratory
BIOL 373 (3) Biometry

U2 or U3 Complementary Courses(33 credits)

Students who take CHEM 212 in U1 complete 30 credits and those exempted from CHEM 212 complete 33 credits selected as follows:

12 credits selected from:

BIOL 300 (3) Molecular Biology of the Gene
BIOL 303 (3) Developmental Biology
BIOL 304 (3) Evolution
BIOL 306 (3) Neural Basis of Behaviour
BIOL 308 (3) Ecological Dynamics

Other Complementary Courses:
18-21 credits in Biology at the 300 level or higher, of which 9 credits may be from other Science departments, with approval of the Adviser.

U3 Required Courses (4 credits)
BIOL 499D1 (2) Honours Seminar in Biology
BIOL 499D2 (2) Honours Seminar in Biology

U3 Complementary Courses (12 credits)
9-12 credits selected from:
BIOL 479D1 (4.5) Honours Research Project 1
BIOL 479D2 (4.5) Honours Research Project 2
BIOL 480D1 (6) Honours Research Project 2
BIOL 480D2 (6) Honours Research Project 2

Attach extra page(s) as needed

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Honours in Biology
Required courses (32-33 credits):

BIOL 200 (3) Molecular Biology
BIOL 201 (3) Cell Biology and Metabolism
BIOL 202 (3) Basic Genetics
BIOL 205 (3) Biology of Organisms
BIOL 206 (3) Methods in Biology of Organisms
BIOL 215 (3) Introduction to Ecology and Evolution
BIOL 301 (4) Cell and Molecular Laboratory
BIOL 373* (3) Biometry
BIOL 499D1/D2 (4) Honours Seminar in Biology
CHEM 212**(4) Introductory Organic Chemistry 1

*If a student has already taken an equivalent statistics course, the credits can be made up with a 3-credit Biology complementary course.

**If a student has already taken CHEM 212 or its equivalent, the credits can be made up with a 3- or 4-credit complementary course to be approved by the Biology Adviser.

Honours complementary course (9-12 credits)
BIOL 479D1/D2 (9) Honours Research Project 1
OR
BIOL 480D1/D2 (12) Honours Research Project 2

Core complementary courses (12 credits):

12 credits selected from:

BIOL 300 (3) Molecular Biology of the Gene
BIOL 303 (3) Developmental Biology
BIOL 304 (3) Evolution
BIOL 306 (3) Neural Basis of Behaviour
BIOL 308 (3) Ecological Dynamics

Other Complementary Courses (15-18 credits):

18 credits of Biology courses at the 300+ level if taking BIOL 479, and 15 credits if taking BIOL 480. With permission of the Biology Adviser, up to 6 credits may be taken from other Science department courses (300+-level). Up to 6 credits of previous independent research courses may be included.

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

Doctor of Philosophy (Ph.D.); Biology

1.1 Major (Legacy= Subject) (30-char. max.)

Biology — Developmental Biology

1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

1.3 Minor (with Concentration, if applicable)
(30 char. max.)

1.4 Category

Faculty Program (FP)	Honours (HON)
Major	Joint Honours Component (HC)
Joint Major	Internship/Co-op
Major Concentration (CON)	Thesis (T)
Minor	Non-Thesis (N)
Minor Concentration (CON)	Other
	Please specify

Option

1.5 Complete Program Title

Doctor of Philosophy (Ph.D.); Biology — Developmental Biology

2.0 Administering Faculty/Unit

Faculty of Science

Offering Faculty/Department

Faculty of Science, Department of Biology

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: 201401

4.0 Existing Credit Weight: 0

Proposed Credit Weight: 0

5.0 Rationale for revised program

The program has had very low enrollment (1 student since 2011), and the central distringuishing feature of the program (lab rotations) is unlikely to be financially feasible in the future. The Cell and Molecular Group in Biology agreed that the best solution is to retire the program. The retirement proposal was supported by the Biology Graduate Training Committee and poassed through the Biology Faculty Assembly.

6.0 Revised Program Description (Maximum 150 words)

8.0 Consultation with Related Units ☐ Yes ☒ No

Financial Consult ☐ Yes ☐ No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	Prof Graham Bell, Chair of Biollogy		December 10th. 2013
Curric/Acad Committee	Prof Lauren Chapman, Chair of GTC, Biology		December 10th. 2013
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

Submitted by

Name	Prof Lauren Chapman
Phone	514 398 6431
Email	Lauren.chapman@mcgill.ca
Submission Date	December 10th. 2013

To be completed by ARR:

CIP Code

Current	**Proposed changes**
Title	
Policy on official end-of-course evaluations	
Policy statement	**1.**
~~1.~~ McGill University values quality in the courses it offers its students. End-of-course evaluations provide valuable student feedback and are one of the ways that McGill works towards maintaining and improving the quality of courses and the student's learning experience. Student involvement in this process is critical to enhance the general quality of teaching and learning.	1.1
~~2.~~ There shall be a university wide course evaluation system, administered through an agreed upon process, which is the official system [Mercury] for collecting course evaluation data from students for all courses subject to evaluation.	1.2
Definitions	**2.**
~~3.1~~ "Academic Unit" includes department, School, Institute and a Faculty without departments.	2.1
~~3.2~~ "Academic Unit Head" includes Chair, Director and, where appropriate, Dean of a Faculty without departments, and Provost when a Dean is the instructor.	2.2
~~3.3~~ "Courses" shall mean all undergraduate and graduate lecture, seminar and laboratory courses listed in the University Calendar.	2.3
~~3.4~~ "Course Evaluations" refers to the end-of-course process of evaluation conducted by means of the Course Evaluation Questionnaire.	2.4
3.5 "Course Evaluation Results" shall mean the results of both the numerical and written comments gathered by means of the Course Evaluation Questionnaire.	2.5
3.6 "Course Evaluation Questionnaire" means the questionnaire devised in accordance with	2.6

this policy for such purpose.	
3.7 “Course Instructors” shall mean the members of the academic staff responsible for a Course.	2.7
Purpose	**3.**
~~4. Course evaluations, as one indicator of teaching effectiveness, are used to:~~ a. help instructors improve the future delivery of courses; ~~and~~ b. inform students about courses and instructors~~.~~	3. Course evaluations at McGill shall be used: a. to help instructors improve the future delivery of courses; b. to inform students about courses and instructors; and c. as one indicator of the quality and effectiveness of teaching.
Scope	**4.**
~~5.~~ All courses with five (5) or more registered students shall be evaluated. Any exception must be approved by the Deputy Provost (Student Life and Learning).	4
Content	**5.**
~~6.1 The Course Evaluation Questionnaire for each course shall not exceed 25 questions. The Course Evaluation Questionnaire shall consist of three parts:~~ ~~a. 4 core questions,~~ ~~b. 21 additional questions, and~~ ~~c. Section for written comments~~	5.1 The Course Evaluation Questionnaire shall consist of two parts: a. Required: i. 4 core questions. ii. Core questions 3 and 4 referring to teaching assistants rather than instructor, if the course has teaching assistants. b. Optional: i. Not to exceed 21 questions: the Academic Unit may include up to 18 questions and the instructor(s) may include up to 3 questions. ii. Up to 3 questions related to teaching assistants, if the course has teaching assistants. Each part must include a space for students to provide written comments. Academic Units are encouraged to select questions for Part b from the recommended pool

	of questions following the best practices as identified on the course evaluation web site.
~~6.2~~ All Course Evaluations Questionnaires shall begin with the following four (4) core questions: 1. Overall, this is an excellent course. 2. Overall, I learned a great deal from this course. 3. Overall, this instructor is an excellent teacher. 4. Overall, I learned a great deal from this instructor.	5.2 When applicable, the Academic Unit may replace the word "instructor" by another appropriate term, such as "teacher" or "lab coordinator".
	5.3 All opinion questions shall be answered on a scale from 1-5 where: 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree Where appropriate, questions shall include a "not applicable" option.
~~6.3 All Course Evaluations Questionnaires shall also include up to 21 additional questions selected by the Academic Unit, of which up to three (3) may be added by the individual course instructor. Units are encouraged to select these additional questions from the recommended pool of questions following the best practices as identified on the course evaluation web site.~~	
	5.4 In multiple instructor courses, each instructor shall be evaluated. Students should not have to respond to more than three (3) instructor specific questions for each instructor.
~~6.4 All questions shall be answered on a scale from 1-5 where:~~	Moved to 5.3

~~1 = Strongly disagree~~ ~~2 = Disagree~~ ~~3 = Neutral~~ ~~4 = Agree~~ ~~5 = Strongly agree~~ ~~Where appropriate, questions shall include a "non-applicable" option.~~	
~~7. In multiple instructor courses, each instructor will be evaluated. Students should not have to respond to more than three (3) instructor specific questions for each instructor.~~	Moved to 5.4
~~8. Teaching assistants (TAs) shall be evaluated as part of the course evaluation process. Instructors shall share individual results of TA questions with the TA as one way to help them improve their teaching abilities. Students shall not have to respond to more than three (3) TA specific questions for each teaching assistant.~~	Moved to 5.1
Timing	**6.**
~~9. The evaluation period shall normally last approximately 3 weeks and end the day before the start of the examination period. Individual academic units may, with the prior approval of the Dean, extend the evaluation period to no later than the last day of exams.~~	6.1 The evaluation period shall normally last approximately six (6) weeks and end no later than two days after the end of the examination period. Academic Units may, with the prior approval of the Dean, may change the closing date of the evaluation period to the day before the start of the examination period and thus shorten the evaluation period to approximately three (3) weeks.
~~10.~~ Results shall not be disclosed to the instructor, the Academic Unit Head or delegate before final grades in the course have been submitted and processed.	6.2
Anonymity and confidentiality	**7.**
~~11.~~ All course evaluation results shall be anonymous.	7.1
~~12.1~~ Written evaluations in the form of comments shall be considered confidential to the Instructor and the Academic Unit Head or	7.2

their delegates.	
~~12.2~~ Numerical evaluation results shall be confidential to the instructor, the Academic Unit Head, and the Dean of the Faculty or their delegates.	7.3
~~12.3~~ Numerical results may be used by individuals other than the Instructor in reporting only if presented in aggregate form.	7.4
Accessibility of results	**8.**
~~13. Numeric results of course evaluations for the previous three academic years shall be made available to McGill students and academic staff, provided two conditions are met:~~ ~~a) the instructor has granted permission to allow access.~~ b) an adequate response rate has been received, as follows: *Class size* — *Response rate (%)* 5-11 — min 5 responses 12-30 — at least 40% 31-100 — at least 35% 101-200 — at least 30% 201 or more — at least 25%	8.1. Numerical results of course evaluations, with the exception of teaching assistant results, shall be made available to McGill students and academic staff, provided two conditions are met: a. an instructor has not objected to access. b. an adequate response rate has been received, as follows: *Class size* — *Response rate (%)* 5-11 — min 5 responses 12-30 — at least 40% 31-100 — at least 35% 101-200 — at least 30% 201 or more — at least 25%
	8.2 Results shall be available for the previous fifteen semesters (five academic years).
Use	**9.**
~~14.1~~ Instructors shall discuss the results of their course evaluations annually with the Academic Unit Head, mentor, or a consultant from Teaching and Learning Services.	9.1
~~14.2~~ Results from course evaluations should be included in the teaching portfolio as part of the evidence of effectiveness.	9.2
~~14.3~~ Students may consult results from previous evaluations as one information	9.3

source about specific courses and instructors.	
Oversight	**10.**
~~15.~~ The Office of the Provost shall be responsible for the application of this policy and its principles. Each ~~Department~~ is responsible for implementing the course evaluation procedure consistent with this policy and University administrative practices.	10 The Office of the Provost shall be responsible for the application of this policy and its principles. Each Academic Unit is responsible for implementing the course evaluation procedure consistent with this policy and University administrative practices.
Depository	**11.**
~~16.~~ There shall be a University wide depository for course evaluation questionnaires. Results data for each department shall be permanently retained in electronic form only. The University's system (Mercury) will serve as the depository.	11
Required statements	**12.**
~~17.~~ The following statement concerning the purpose, uses, utility, and mode of accessibility shall be put at the top of every course evaluation questionnaire by the University: *"Subject to certain limitations, end-of-course evaluation results are to be accessible to the McGill community. A statistical summary of responses will be used:* ~~1.~~ *to help instructors improve future offerings of courses;* ~~2.~~ *to inform students about courses and instructors~~.~~* *Any written comments will be used to provide useful information (e.g., suggested improvements) to the instructor and Head of the academic unit but will not be available to the McGill community.* *Course evaluations are completely anonymous.* *Results are not available to an instructor until the final grades for the course have been*	12.1 The following statement concerning the purpose, uses, utility, and mode of accessibility shall be put at the top of every course evaluation questionnaire by the University: *"Subject to certain limitations, end-of-course evaluation results are to be accessible to the McGill community. A statistical summary of responses will be used:* *a. to help instructors improve future offerings of courses;* *b. to inform students about courses and instructors; and* *c. as one indicator of the quality and effectiveness of teaching.* *Any written comments will be used to provide useful information (e.g., suggested improvements) to the instructor and Head of the academic unit but will not be available to the McGill community.* *Course evaluations are completely anonymous.* *Results are not available to an instructor until the final grades for the course have been*

submitted and approved."	*submitted and approved."* *"add French version here"*
~~18.~~ The following statement shall be put by the University at the top of course evaluation results that are disseminated to students: ~~*"End-of-course evaluations results, as one indicator of teaching effectiveness, are used to:*~~ ~~*1. help instructors improve future offerings of courses; and*~~ ~~*2. inform students about courses and instructors.*~~ *Written comments are treated as confidential and are not made available to the McGill community.* *"Total number of completed evaluations xx* *Total enrolment in course xx* *Response rate xx%"*	12.2 The following statement shall be put by the University at the top of course evaluation results that are disseminated to students: *"End-of-course evaluations results at McGill are used:* *a. to help instructors improve the future delivery of courses;* *b. to inform students about courses and instructors; and* *c. as one indicator of the quality and effectiveness of teaching.* *Written comments are treated as confidential and are not made available to the McGill community.* *"Total number of completed evaluations xx* *Total enrolment in course xx* *Response rate xx%"* *"add French version here"*