Minutes of the meeting held on 23 February, 2016, at 3:00 p.m. in Arts Council Room, Arts 160.

PRESENT: Dean Bruce Lennox (Chair), Associate Dean Tamara Western (Vice-Chair), Director Nicole Allard, Professors Huy Bui, William Coish, Thomas Duchaine, Irene Gregory-Eaves, Vojkan Jaksic, Daniel Kirshbaum, Michael Langer, Michel Lapointe, Greg Marczyński, Anthony Mittermaier, Kristina Onishi (in lieu of Caroline Palmer), Jeanne Paquette, Kathy Roulet; Natalie Waters; John Lin, Amrit Sampalli (in lieu of Matthaeus Ware), Matthew Rowe.

GUEST: Professor Axel Hundemer

REGRETS: Professors Barbara Hales, Ana Nyzhnyk; Megan Fothergill, Joanna Liu, Alvin Qiu, Mackenzie Webber.


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

(1) ADOPTION OF AGENDA

An additional item, B.A. & Sc. Minor in Geographic Information Systems and Remote Sensing (AC-15-47A), to be added under Geography, Item #4

Prof. Paquette moved, seconded by Prof. Mittermaier, that the amended Agenda be adopted.

The motion carried.

(2) MINUTES OF 19 JANUARY, 2016 AC-15-45

Prof. Paquette moved, seconded by Prof. Mittermaier, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

Minor Program in Entrepreneurship for Science Students

Associate Dean Western said that the Minor Program in Entrepreneurship for Science Students had been approved at APC, and will now be reported to a future Senate meeting.

Also, as discussed at a previous meeting of the Academic Committee, a subcommittee to the Academic Committee has been struck to look at what an Entrepreneurship Honours Independent Studies Project course might look like, and how it might piloted with several departments. The members are:

Associate Dean (Academic) Tamara Western (Chair)
Prof. Masad Damha (Chemistry)
Prof. Thomas Duchaine (Biochemistry)
Prof. Kevin Manaugh (Geography)
603.3 The subcommittee will be meeting in the near future, and ideas will be brought back to a future Academic Committee meeting.

(4) GEOGRAPHY

New Course:
GEOG 417/617 Urban Geography
3 credits

604.1 Prof. Lapointe said that GEOG 517 had been discussed at the previous Academic Committee meeting, and it was decided because there were different methods of assessment for undergraduate and graduate students, that the course be tabled.

604.2 Prof. Lapointe said the Department of Geography, in view of the AC comments, decided to create two courses, GEOG 417 for undergraduate students, and GEOG 617 for graduate students. These courses will run simultaneously, and will have different evaluations.

Associate Dean Western moved, seconded by Prof. Paquette, that the courses be adopted.

The motion carried.

B.Sc. Program Changes:
- Minor in Geographic Information Systems and Remote Sensing

B.A. & Sc. Program Changes:
- Minor in Geographic Information Systems and Remote Sensing

The above two programs are in fact identical.

604.3 Prof. Lapointe explained that the main issue in the above Minor Programs was that, given the teaching resources and sabbatical leaves, it was increasingly problematic for students to satisfy the program requirements of four Required courses. He said that the program has been modified to allow more flexibility by moving some Required courses to the list of Complementary courses. Also, COMP 202, Foundations of Programming, has been added as a Required course.

604.4 Associate Dean Western moved, seconded by Prof. Lapointe, that the above changes be approved, with those for the B.A. & Sc. pending approval by the B.A. & Sc. PAC.

The motion carried.

For Information Only - Documents available upon request
(i) New B.A. Program:
- Minor Concentration in Health Geography
(ii) B.A. Program Changes:
- Minor Concentration in Geography (Urban Systems)
- Major Concentration in Geography (Urban Systems)

(5) COMPUTER SCIENCE
Prof. Langer said that the only change for COMP 202 was an expansion of the course description.

Associate Dean Western moved, seconded by Prof. Duchaine, that the change be approved.

The motion carried.

Prof. Langer explained that the description better summarizes the topics covered in COMP 250; that a course listed under Restrictions was being removed because it had recently been retired; and that under Supplemental Information, students are given more details of the expected background for COMP 250.

In reply to Associate Dean Western, Prof. Langer clarified the relation between COMP 202 and COMP 250. He said that students can take COMP 202 with no prior knowledge or background in computer science or programming, whereas COMP 250 students require some knowledge of programming. Students can take COMP 202 and then COMP 250 for credits, but not the other way around.

Associate Dean Western moved, seconded by Prof. Duchaine, that the changes be approved.

The motion carried.

Prof. Langer said that the enrolment had grown greatly, and included students with a wide range of backgrounds. He said by including a more demanding prerequisite course, COMP 250, students would be better prepared.

Associate Dean Western moved, seconded by Prof. Lapointe, that the changes be approved.

The motion carried.

Prof. Langer explained that increasing the credit weight from three to four would reflect the expected workload in COMP 400. The description was being changed for the sake of clarity. Also, the restrictions now explicitly stated that non-Honours students could take COMP 400, with permission of the department.

Director Allard said that it was unusual to explicitly state that Majors students could take a course with Honours in the title. She said that other departments
either have a course called Research Project, which is required for Honours students but may be taken with permission by Majors students; or they have two different course numbers, one for Honours students and one for Majors. She said it could cause confusion on a transcript.

605.7 Associate Dean Western said that there seemed to be enough demand from non-Honours students for COMP 400 to justify either a title change or a second course.

Associate Dean Western moved, seconded by Prof. Lapointe, that the above changes be approved.

The motion carried.

605.8 After a straw vote requesting that the School of Computer Science look into the possibility of either renaming COMP 400 or creating a second course, Prof. Langer said he would take the Committee's recommendations back to the School of Computer Science. This will be done before the course is presented to the Faculty of Science meeting scheduled for 15 March 2016.

Secretary's Note: The title of COMP 400 has been changed to Project in Computer Science.

605.9 Prof. Langer said that due to the heavy course load, the credits were being increased from three to four. Similarly, a number of other Computer Science courses were three credits, rather than four, resulting in a heavy workload for students. The School would be bringing these courses to the AC for an increase in credit weight, allowing U3 students to take four rather five courses.

Associate Dean Western moved, seconded by Prof. Lapointe, that the changes be approved.

The motion carried.

605.10 Prof. Langer said that the description was being made more detailed, and one of the prerequisites was being removed because students were having scheduling conflicts.

Associate Dean Western moved, seconded by Prof. Lapointe, that the changes be approved.

The motion carried.

(6) EARTH & PLANETARY SCIENCES/PHYSICS

New Double-Prefix Course:
EPSC 186 [renumbered from -182]/PHYS 186 (New)  
Astrobiology  
3 credits

AC-15-54/54A
Prof. Paquette said that EPSC 182 had originally been a double-prefix course with ANAT 182, a consequence of a joint appointment. The professor who had taught the course is no longer in the Faculty of Science, but the Department of Earth & Planetary Sciences wished to retain Astrobiology as a double-prefix course; Physics was an appropriate choice of department. EPSC 182 was being renumbered to EPSC 186, and will be double-prefixed with the new PHYS 186.

Associate Dean Western moved, seconded by Prof. Coish, that EPSC 182 be renumbered to EPSC 186.

The motion carried.

Associate Dean Western moved, seconded by Prof. Coish, that the new course, PHYS 186, be adopted.

The motion carried.

(7) PHYSICS

Course Retirement (formerly double-prefixed with CHEM 334, which is not being retired)
PHYS 334 Advanced Materials AC-15-55
3 credits

Prof. Coish said that PHYS 334 was double-prefixed with CHEM 334. However, due to a low Physics enrolment, PHYS 334 has not been offered since 2008. CHEM 334 was not being retired.

Associate Dean Western moved, seconded by Prof. Duchaine, that the course be retired.

The motion carried.

Programs Affected by the Retirement of PHYS 334:
• Bachelor of Arts and Science (B.A. & Sc.) - Major Concentration Physics (36 credits)
• Bachelor of Education (B.Ed.) - Secondary Science and Technology (120 credits)
• Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) - Major Concentration Physics with Minor Biology for Teachers (135 credits)
• Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) - Major Concentration Physics with Minor Chemistry for Teachers (135 credits)

(8) Update on Grades Review

A subcommittee of the Academic Committee had been struck to report on an increase in the number of 4.00 SGPAs in the Faculty of Science, which has become apparent in considering students for scholarships. The members of the subcommittee were:

Associate Dean Tamara Western (Chair)
In conjunction with Document AC-15-56, Associate Dean Western gave a
detailed presentation on this phenomenon.

Following is an "Executive Summary & Recommendation" of the Report.

Executive Summary & Recommendation

During recent graduation and in-course award allocations, it has become
apparent that there has been a significant increase in the number of students
receiving sessional GPAs of 4.0 in the Faculty of Science. To investigate this, the
subcommittee analyzed grade data for all BSc courses at every course level from
every term of Fall 2007 through Winter 2015. Overall, the results demonstrate
that grades have been increasing generally across the Faculty of Science, both
in terms of overall mean (total student population) and percentage of A's
awarded (high end of the student grade distribution). Further, the observed
increase cannot be traced to particular year levels as was the case in a 2008
report. Data was also generated for the classes taught by each department
teaching BSc programs. The results demonstrate variability between
departments (grades higher and lower than what seen for all Science), making it
difficult to conclude if any particular departments are driving the increases. Since
there has been an increase in admission standards in terms of minimum grade
cutoffs over the last six years, these changes were tracked in comparison with
overall grades for courses offered by the Faculty of Science. These data suggest
that higher admission standards and thus quality of BSc students could explain
some portion of the grade increases seen over recent years. The issue that
remains is whether or not it is a problem to have overall high grade averages.
Perhaps it is not a surprise and should be expected with the quality of students
that we are teaching. A related issue is the meaning of an "A" grade that spans
from 85% to 100%, especially considering our high mean grades. The
subcommittee collected percent grade data from representative courses at
different course levels to determine the distribution of grades seen within the A
range. These data demonstrate that 50-65% of A's fall in the 85-89% category,
while ~10% of A's represent grades of 95% or above. These differences
demonstrate that significant information on student performance is lost in the
reporting of a simple A for grades of 85-100%.

It is recommended that the Faculty of Science lobby the university to
recognize this gap in information on student performance and institute the
reporting of percent grades along with letter grades, when available.

Associate Dean Western asked for members’ questions and comments.

Question from Prof. Duchaine: Consequences of grade inflation? Is it damaging?
National and international level?

Answer: Associate Dean Western said that the issue is that McGill's "A" grade
ranges from 85-100%, and when it comes to scholarship decisions, it is difficult to
distinguish between 85% and 95%.

Question from Prof. Duchaine: Why is there no A+ at McGill?
Dean Lennox said there had been a debate on instituting an A+ grade about ten years ago, and that the students had strongly opposed it. The idea had been defeated. He added that McGill suffers in NSERC competitions because other universities have an A+ grade.

Dean Lennox commented that before Banner was adopted, numerical grades could be reported along letter grades, but apparently Banner could not handle numerical grades and now no numerical grades are submitted. However, Banner was adopted about twenty years ago, and perhaps it could deal with numerical grades now.

Question from Prof. Hundemer: What exactly is meant by reporting in the recommendation? Would the numerical grade be available to students or would it be used only for scholarships, etc.? He added that displaying numerical grades could actually be a disadvantage to students who had an A with 85%.

Answer: Director Allard said some information for internal use only is already suppressed on official transcripts, but can be seen on unofficial transcripts, so there is a precedent for two levels of information.

Comment from Prof. Mittermaier: Regarding numerical grades being a potential disadvantage to students with an 85% A, there would be no point in submitting numerical grades if they were not to be made available to scholarship granting agencies and to medical schools.

Comment from Prof. Hundemer: Institution of an A+ grade would result in more pressure from students to round up grades to the A+.

Comments from Prof. Gregory-Eaves, Director Allard and Dean Lennox: McGill students are at a disadvantage in applying for initial funding as graduate students because of having only an A grade.

Comment from Prof. Mittermaier: It would be a good idea to try to persuade students of the advantage of having more grade information.

Comment from Matthew Rowe and Director Allard: Instituting an A+ grade or having numerical grades would be advantageous only to the 10% of A students who have 95% or above, and disadvantageous to the other 90% of A students.

Comment from Prof. Mittermaier: Setting the A/A+ division at a grade of 90 would split the students into half who would benefit and half who would not.

Question from Prof. Kirshbaum: Why is McGill the only place that cannot institute an A+ grade?

Answer from Associate Dean Western: It's historical, and students are concerned with comparisons between decades.

Comment from Prof. Duchaine: McGill a C+ and a B+ so there is no reason why it should not have an A+ grade.

Comment from Dean Lennox: Students do not leave McGill with an objective measure (grades) of their true worth. Is this the right thing to do? McGill should do what is right for its students.
Comment from Associate Dean Western: If members want departmental-specific data, she has it available.

Question from Prof. Lapointe: There is no point in going ahead with numerical grades or an A* grade if granting agencies look only at GPAs. What is it that granting agencies consider?

Answer from Dean Lennox: Assessors at granting agencies have the students' transcripts, and if these contain numerical grades, the assessors will see them.

Question from Prof. Mittermaier: How many Canadian universities provide numerical grades on their transcripts?

Answer from Dean Lennox: It should be possible to determine this from graduate applications to departments from other universities. Graduate Program Directors or Graduate Program Coordinators would have this information.

Comment from Prof. Gregory-Eaves: Numerical grades should be phased in, beginning with the internal transcript.

Comment from Director Allard: The Registrar's Office will claim that there is only one column in Banner for grades, so the choice must be made between numerical and letter grades.

In response to Associate Dean Western, Dean Lennox said that in reference letters it was fine to include the actual grade from an unofficial transcript.

Dean Lennox said that if members agreed, he would like the recommendation to be presented to a Faculty of Science meeting.

Associate Dean Western moved, seconded by Prof. Duchaine, that the recommendation of the subcommittee be brought to a Faculty of Science meeting.

The motion carried.

Associate Dean Western said that if members had further comments, they could get in touch with her. She had graphs from the Report available to send to AC representatives and Chairs/Directors.

(9) SUS Activities

Mr. John Lin, Vice-President (Academic Affairs), reported that the SUS was currently running an election to select next year's Council. In reply to Dean Lennox, Mr. Lin said that a number of referenda questions were being asked at the same time.

(10) OTHER BUSINESS

There being no other business, Prof. Duchaine moved, seconded by Director Allard, that the meeting be adjourned at 4:26 p.m.

The motion carried.