Minutes of the meeting held on 24 November, 2015, at 2:30 p.m. in Leacock Building, Room 738.

PRESENT: Dean Bruce Lennox (Chair), Associate Dean Tamara Western (Vice-Chair), Professors Thomas Duchaine, Irene Gregory-Eaves, Vojkan Jaksic, Daniel Kirshbaum, Michael Langer, Anthony Mittermaier, Caroline Palmer, Jeannie Paquette, Kenneth Ragan (in place of William Coish), Kathy Roulet; Matthew Rowe, Matthaeus Ware, Mackenzie Webber, Isabela Vitienes (in place of John Lin),

REGRETS: Director Nicole Allard, Professors Barbara Hales, Michel Lapointe, Craig Mandato, Greg Marczynski, Ana Nyzhnyk; Ms. Natalie Waters; Joanna Liu, Alvin Qiu, Megan Fothergill.


Dean Lennox called the meeting to order at 2:35 p.m.

(1) ADOPTION OF AGENDA

Prof. Paquette moved, seconded by Prof. Gregory-Eaves, that the Agenda be adopted.

The motion carried.

(2) MINUTES OF 28 OCTOBER, 2015

Ms. Roulet moved, seconded by Prof. Palmer, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

- “Prerequisites” or Expected Competencies

303.1 Dean Lennox said that in relation to the issue of prerequisites, a computer science course had expected a certain degree of "competency" in computer programming. He said it was important that students are informed of any "competencies," which are in practice similar to prerequisites. Students shouldn’t find out on the first day of class the degree of knowledge that is expected of them. Instructors should be mindful of the issue, and where appropriate should specify any expected "competencies" in the Supplementary Calendar Information box in course proposal forms.

(4) B.A. & Sc.

- Interfaculty Program in Cognitive Science
- Honours Program in Cognitive Science

304.1 Associate Dean Western introduced Prof. Joelle Pineau, the new Program Director of the B.A. & Sc. Cognitive Science programs. The Cognitive Science Committee was proposing updates to the programs.
304.2 Prof. Pineau said that the Cognitive Science Committee consisted of a representative from each of the participating units (Computer Science, Linguistics, Neuroscience, Philosophy, Psychology), and had been involved in discussions over the past year about the programs.

304.3 Prof. Pineau said there were two major problems with the programs as they currently existed. First, because the students chose both a primary and a secondary stream, students were not getting enough specialized credits to enter many graduate studies programmes. Second, some students (those who chose Neuroscience and Psychology as their streams), were not getting enough breadth from the current program, since the course content in these two disciplines was rather similar and frequently overlapped. The current changes were a response to this. Students will now be required to choose only one stream, and not necessarily a secondary one, so the credits that had previously gone to the secondary stream could now be distributed broadly or even applied to the primary stream. Regarding breadth in general, 21 credits of "Core Complementary Courses" will be introduced.

304.4 The capstone course was being removed and its three credits added to the upper-level credit requirement. Additionally, the Complementary Course lists in each of the disciplines have been revised.

304.5 A Town Hall meeting with Cognitive Science students was held, and the feedback regarding the proposed changes was positive.

304.6 Associate Dean Western said that the B.A. & Sc. Program Administration Committee (PAC) had approved the changes on 28 October 2015. The programs will now be going through the approvals process in both the Faculty of Arts and Faculty of Science.

304.7 In response to a member who asked how completeness was measured, Prof. Pineau said that she did not have a formula for defining completeness. The implementation of the Core Complementary Courses worked towards completeness. She had consulted other Cognitive Science programs in Canada and the USA, and found that they had a similar structure to the proposed program.

304.8 Dean Lennox added that the program was very well thought out and comprehensive, and thanked Prof. Pineau for her efforts.

304.9 Prof. Pineau also thanked the AC members who had been involved in the process.

Prof. Gregory-Eaves moved, seconded by Prof. Langer, that the above changes be approved.

The motion carried.

(5) PHYSIOLOGY/MATHEMATICS & STATISTICS/PHYSICS
- Major in Physiology & Mathematics AC-15-26
- Major in Physiology & Physics AC-15-27

305.1 Associate Dean Western said that some changes were common to both Majors. The instructor for PHYS 413 had retired, and PHYS 519 was being added to the programs as an alternate until another instructor takes over after which PHYS 519 will remain as an option. MATH 437, previously offered every alternate year,
would now be offered every year, allowing students to take MATH 326 in a prior term, rather than as a corequisite.

305.2 Additionally, for the Major in Physiology & Physics, the lecture course, PHYS 333, was being moved to allow students to take it before taking the laboratory course, PHYS 339.

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

The motion carried.

(6) COMPUTER SCIENCE/BIOLOGY

Program Changes:
- Joint Major in Computer Science & Biology

306.1 Prof. Langer said that the changes involved removal of courses no longer offered; addition of Complementary courses in both Biology and Computer Science to give students more flexibility; removal of the option of taking Math courses that did not provide sufficient background in Probability and Statistics; and the creation of three optional streams.

306.2 Additionally, Prof. Langer said that in order to do well in the Joint Major, students needed a strong, broad Science background, and 10 highly recommended freshman courses were being specified in the program description.

306.3 In reply to Dean Lennox who asked whether Prof. Langer had created a roadmap for students who did not take all 10 courses in their freshman year, Prof. Langer said he had not done so, but he thought Prof. Mathieu Blanchette had. Dean Lennox said SOUSA should have a copy of a roadmap. Prof. Gregory-Eaves pointed out that most students have many advanced placement credits, which eases the burden.

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

The motion carried.

New Course
- COMP 402D1,D2 Honours Project CS and Biology
  6 credits

New Program
- Joint Honours in Computer Science & Biology

306.4 Prof. Langer introduced COMP 402, a six-credit research course, designed for the new Joint Honours. There was a discussion concerning the possibility of students wishing to change labs partway through the course, and it was agreed that the syllabus would refer to "exceptional circumstances."

306.5 Prof. Langer introduced the Joint Honours Program in Computer Science and Biology. The primary differences from the Joint Major are the inclusion of COMP 402 and an additional Math course, as well as having to maintain a GPA of 3.5 or above.
Associate Dean Western moved, seconded by Prof. Langer, that new course, COMP 402, and the new Joint Honours Program in Computer Science and Biology be adopted.

The motion carried.

(7) COMPUTER SCIENCE
- Memo re COMP 400, COMP 203, COMP 431

307.1 Prof. Langer said the changes involved removal of COMP 203 and COMP 431 from any mention in various courses and programs, since the two courses have been retired. Also, the clause stating that non-Honours students were not allowed to take COMP 400, Honours Project in Computer Science, should be removed from various programs since non-Honours students have been allowed to take COMP 400, and allowed to take it as a Complementary course in their program.

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

The motion carried.

(8) BIOLOGY
BIOL 303 Developmental Biology
Addition of restriction
3 credits

308.1 Prof. Gregory-Eaves explained that a restriction was being applied to BIOL 303 due to some overlap with ANAT 381.

308.2 Associate Dean Western added that a previous Academic Committee meeting, the reciprocal restriction had been added to ANAT 381.

308.3 In reply to a member who asked about the percentage of overlap, Associate Dean Western said that there was considerable overlap, but that the focus was different. In response to Dean Lennox who asked how many students were registered in the course, and whether two courses were needed, Associate Dean Western said that the enrolment was high in BIOL 303, although she did not know the enrolment for ANAT 381. Separate courses seemed necessary on the basis of enrolment numbers. Also, the focuses of the courses were different.

Prof. Gregory-Eaves moved, seconded by Prof. Duchaine, that the changes be approved.

The motion carried.

(9) PSYCHOLOGY
PSYC 528 Vulnerability to Dep. and Anx.
Changes: title, description
3 credits

309.1 The changes in title and description were mainly housekeeping in nature.

Associate Dean Western moved, seconded by Prof. Palmer, that the above changes be approved.
The motion carried.

MINOR IN ENTREPRENEURSHIP FOR SCIENCE STUDENTS

310.1 Associate Dean Western introduced the Minor Program in Entrepreneurship for Science Students, and said there have been ongoing discussions for the last six months with the Faculty of Management. The Faculty of Management has been partnering with different faculties in the University to put on the Minor in Entrepreneurship. She said there had previously been a Minor in Technological Entrepreneurship but it had been highly problematic because of difficulties in offering the courses.

310.2 The Faculty of Management has proposed a pair of integrated courses, INTG 201 and INTG 202, to bring together students from other degree programs. INTG 201 and INTG 202 are currently being offered for the first time as of Fall 2015. The Faculty of Agricultural and Environmental Sciences is currently running their version of the Minor. After taking 12 credits of Required Management courses, students will take 6 credits of Complementary courses. The Faculty of Science currently has only one course (MIMM 387) in the Complementary list, and Associate Dean Western said that units interested in entrepreneurship should consider adding other courses.

310.3 Dean Lennox said that the University has had an Innovation Steering Committee for the last three years, which he sat on, and that the successor Committee (Innovation Council) was in the final stages of recruiting an Associate Vice-Principal (Research & Innovation). Prof. Steve Maguire, Faculty of Management, is on the Innovation Council, and has taken the initiative of putting together the Management component of the Minor in Entrepreneurship.

310.4 A member said he had had personal experience with entrepreneurship and that “street smarts” and a certain personality were needed; these were difficult to define and not necessarily able to be taught. As well, an understanding of the workings of the economy, and an ability to raise capital were essential. The member said that he did not see an economic component to the proposed courses in the Minor.

Secretary’s Note: A meeting took place involving Prof. Maguire, Associate Dean Western, Director Allard and Josie D’Amico on 26 November, 2015, at which Prof. Maguire was asked for more information concerning the Management aspect of the Minor. Specific courses on economics will not be part of the Minor at this time.

310.5 Associate Dean Western said that the Faculty of Management would welcome internship courses in the Faculty of Science. Units in the Faculty of Science could create Honours project courses involving entrepreneurship/internship that could be taken for credit, for students not necessarily interested in going to graduate school.

310.6 Dean Lennox said that if the Minor in Entrepreneurship was approved at the current meeting, he would encourage AC representatives to go back to their units to discuss the possibility of creating entrepreneurship/internship-type honours project courses, perhaps involving Prof. Maguire as a co-mentor. Many units already have some entrepreneurship-type information at hand, e.g., units with professors having start-up companies.

310.7 Associate Dean Western added that the current Minor was just a beginning, and that certainly courses could be added to it at a later date. As well, units should
feel free to bring forward courses related to the Minor, but that can be taken inside or outside the Minor.

310.8 Another suggestion made was to include a course related to intellectual property. Associate Dean Western said that MIMM 387 included some aspects of intellectual property and case studies. Some Science units were interested in offerings concerning intellectual property and related topics.

Associate Dean Western moved, seconded by Prof. Duchaine, that the new Minor in Entrepreneurship for Science Students be adopted.

The motion carried.

(11) SCIENCE UNDERGRADUATE SOCIETY (SUS) ACTIVITIES

311.1 On behalf of Mr. John Lin, Vice-President, Isabelle Vitienes, reported on the following activities of the SUS:

1. Burnside Basement renovations [President]
   1.1. Performed audits on the locker count for design changes
   1.2. Awaiting preliminary designs
2. Academic Events - Research Seminar (Nov 25-26) [Academic]
   2.1. To be hosted by Mr. Victor Chisholm
3. First-Year Undergraduate Science Society [Communications]
   3.1. Council elected
   4.1. Two years of audits completed

311.2 Dean Lennox said that he would like someone from the SUS Executive to contact him regarding a proposal he had recently received from a group of professors. He thought that the SUS would be very interested in the proposal.

(12) OTHER BUSINESS

312.1 As the following course proposal was not on the Agenda for the current meeting, a straw vote was held on whether to consider CHEM 267. It was decided to review CHEM 267.

CHEMISTRY

New Course:

3 credits
Combination of CHEM 287 (2 credits) and CHEM 297 (1 credit)

312.2 Prof. Mittermaier said that the content of CHEM 287 (a lecture course) was linked to that of CHEM 297 (a laboratory course), and that students were encouraged to take them both together. However, not all students did so, resulting in poorer performance, and combining the courses would resolve the issue. The change had been approved by Chemistry's Curriculum Committee and by the Chair, but because of scheduling had not yet reached the departmental meeting. Prof. Mittermaier hoped to get the process initially underway in the Academic Committee, and he asked that the AC approve the combination, pending departmental approval.

312.3 Dean Lennox said that there had been originally one course, which had been a Required Course for Biochemistry students. This had created overcrowding and
consequent scheduling problems that led to the need to run the lab in two terms. The course was now a Complementary Course for Biochemistry students, reducing enrolment dramatically, such that all students can take it in one term while the lecture is running.

312.4 It was suggested that Prof. Mittermaier should produce a list of programs affected, to be attached to the course proposal form.

312.5 Prof. Mittermaier moved, seconded by Prof. Duchaine, that the new course be adopted, pending (i) approval at the next departmental meeting in the Department of Chemistry, and (ii) receipt of a list of affected programs.

The motion carried.

Secretary's Note: A list of the programs affected has been received, as well as the course syllabus.

There being no further business, the meeting adjourned at 3:45 p.m.