FACULTY OF SCIENCE Meeting of Faculty Tuesday, 8 December, 2015 Leacock Council Room - L232

ATTENDANCE: As recorded in the Faculty Appendix Book

DOCUMENTS: S-15-14, S-15-15

Before the meeting, **Professor Mikael Pichot** from the Department of Mathematics & Statistics gave a short presentation on his area of research.

Dean Lennox noted that following Prof. Pichot's Soup & Science research presentation in Fall 2015, a large crowd of students had gathered around him, which was a very impressive outcome for a chalk-talk given by a pure mathematician. It had made Dean Lennox proud of the Faculty of Science.

Dean Lennox called the meeting to order at 3:05 p.m.

1) ADOPTION OF AGENDA

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

The motion carried.

2) MINUTES OF 17 NOVEMBER, 2015

S-15-14

Prof. Gyakum **moved**, seconded by Prof. Damha, that the Minutes be approved.

The motion carried.

3) BUSINESS ARISING FROM THE MINUTES

403.1 Dean Lennox reminded members that the Faculty of Science Holiday Party will be held at Thompson House on Tuesday, 15 December, 2015 at 4 p.m. If members had not yet RSVP'd, they should do so, as soon as possible.

Regarding Centraide, Dean Lennox said he was pleased to report that McGill had exceeded its target, and that the Faculty of Science's participation had exceeded last year's. He thanked Anna Cerrone for representing the Faculty on the Centraide Committee. Because Centraide was so integrated into the community, it was very important for McGill to support it. McGill is the number one corporate contributor to Centraide.

4) REPORT OF COMMITTEE

- Academic Committee - Associate Dean Tamara Western

S-15-15

The Academic Committee approved the following on Tuesday, 24 November 2015:

SECTION A: NEW COURSES & PROGRAM

(1) Computer Science/Biology

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

AC-15-29

404.1 Associate Dean Western said that COMP 402D1,D2 is based on a pre-existing three-credit research course for the Joint Major in Computer Science and Biology.

Associate Dean Western moved, seconded by Prof. Dudek, that the course be adopted.

The motion carried.

- Joint Honours in Computer Science & Biology

AC-15-30

Associate Dean Western said the new Joint Honours in Computer Science and Biology replaces a three-credit research course with a six-credit research course (COMP 402, above), and an additional Math course; also, COMP 252 replaces COMP 251.

Associate Dean Western moved, seconded by Prof. Bell, that the program be adopted.

The motion carried.

(2) Chemistry

CHEM 267 Intro. Chemical Analysis

AC-15-35

3 credits

Combination of CHEM 287 (lecture - 2 credits) and CHEM 297

(laboratory - 1 credit)

- Associate Dean Western said that enrolment pressure had been responsible for an initial integrated lecture/laboratory course being split into the two separate courses. The enrolment pressure had now been relieved, and the separate courses were being combined into one, which was more beneficial for the students. For the time being, the courses (CHEM 287, CHEM 297) will also remain as separate courses to allow students who have completed one, to take, or retake, the other.
- Associate Dean Western **moved**, seconded by Prof. Damha, that the course be adopted, pending approval by the Department of Chemistry on 10 December 2015.

The motion carried.

Secretary's Note: CHEM 267 has been approved by the Department of Chemistry.

SECTION B: COURSE REVISIONS

(1) Biology

BIOL 303 Developmental Biology

AC-15-32

AC-15-33

Addition of restriction

3 credits

404.5 Associate Dean Western said the restriction was being added in reciprocity to the restriction recently added to ANAT 381.

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

The motion carried.

(2) Psychology

PSYC 528 Vulnerability to Dep. and Anx.

Changes: title, description

3 credits

404.6 Associate Dean Western said the title and description changes better reflected the course content, and the close association between depression and anxiety.

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

The motion carried.

SECTION C: PROGRAM CHANGES:

(1) B.A. & Sc.

- Interfaculty Program in Cognitive Science

AC-15-24 AC-15-25

- Honours Program in Cognitive Science

Associate Dean Western said the changes allowed both a greater breadth for students, and more depth to give students sufficient background to enter graduate programs. Additionally, Complementary courses have been modified. The B.A. & Sc. Programs in Cognitive Science now have a new Director, Prof. Joelle Pineau, School of Computer Science.

Associate Dean Western **moved**, seconded by Prof. Dudek, that the above program changes be approved.

The motion carried.

(2) Physiology/Mathematics & Statistics/Physics

- Major in Physiology & Mathematics

AC-15-26

Associate Dean Western said that PHYS 519 will initially be offered as a replacement for PHYS 413, and when PHYS 413 is once again offered, PHYS 519 will remain as an alternative. MATH 437 will now be offered every year, rather than in alternate years, allowing all students to take MATH 326 as its prerequisite, rather than some students taking it as a co-requisite.

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

The motion carried.

- Major in Physiology & Physics

AC-15-27

Associate Dean Western said that the changes above regarding PHYS 413/519 and MATH 326/437 applied also to the Major in Physiology & Physics. Additionally, the years in which students take PHYS 339 (laboratory course) and PHYS 333 (lecture course) have been reversed.

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

The motion carried.

(3) Computer Science/Biology

- Joint Major in Computer Science & Biology

AC-15-28

404.10 Associate Dean Western said that the changes were basically housekeeping in nature: removal of courses no longer offered; the implementation of three optional streams;

addition of Complementary courses to provide more flexibility; restriction of Probability and Statistics courses to those providing optimal background; specification of ten highly recommended freshman courses.

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

The motion carried.

(4) MINOR IN ENTREPRENEURSHIP FOR SCIENCE STUDENTS

AC-15-34

- Associate Dean Western said that the Minor in Entrepreneurship for Science Students would replace the current Minor in Technological Entrepreneurship for Science Students, which had always had problems in its course offerings, and has not been offered for a number of years. The Minor in Entrepreneurship for Science Students had been put together with extensive consultation from the Faculty of Management. Required courses consisted of 12 credits of Management courses: six of integrated Management Essentials and six of Entrepreneurship. For the six credits of Complementary courses, students can currently choose from Technological Entrepreneurship, Social Entrepreneurship (3 credits each, Management courses), and MIMM 387, The Business of Science (3 credits). It is anticipated that more courses from the Faculty of Science will be added to the Complementary list.
- A member pointed out that the proposed Minor contains a statement to the effect that students taking the Minor cannot take additional courses outside the Faculties of Arts and of Science. However, if a student took MIMM 387, the student would still have three credits in reserve. Associate Dean Western said that the statement would be modified appropriately.
- 404.13 Associate Dean Western **moved**, seconded by Prof. Damha, that the changes be approved, pending receipt of official consultation from the Faculty of Management.

The motion carried.

Secretary's Note: The statement regarding credit limits will be removed from the Minor. Director Allard will present a proposal to extend the credit limit outside the Faculties of Arts and of Science, at a future Academic Committee meeting.

SECTION D: OTHER (For Approval)

Computer Science

- Memo re COMP 400, COMP 203, COMP 431

AC-15-31

Associate Dean Western said that the changes were (1) removal of two retired courses (COMP 203, COMP 431), (2) removal of a restriction stating that non-Honours students could not take COMP 400, Honours Project in Computer Science.

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

The motion carried.

- 404.15 Dean Lennox thanked Associate Dean Western for guiding the meeting through the Academic Committee report.
- 404.16 Dean Lennox said that although no serious problems emerged in the current meeting with what had been previously been approved by the Academic Committee, this did not

mean that the Faculty meeting was simply going through the motions; sometimes important issues were caught at Faculty of Science meetings. However, the fact that Academic Committee reports normally sail through Faculty meetings with few issues, was a reflection of the diligent work of the members of the Academic Committee. He thanked all the members of the Academic Committee for their conscientious efforts.

Dean Lennox mentioned that this was a busy time, with departments wishing to update their offerings in time for inclusion in the eCalendar.

5) DEAN'S BUSINESS

- a) Announcements
- Dean Lennox said that although he had no announcements, he would like to report on a recent visit to the Bellairs Research Institute in Barbados. He, along with Anna Campana, Director of Administration, had attended a Board Meeting there. Barbados is one of a number of important field stations in the Faculty of Science. A number of McGill Science students were conducting business and social entrepreneurship research projects in Barbados, contributing locally. He, along with local Barbadian leaders, attended presentations by five groups of students on their projects, and was extremely impressed. The presentations were great examples of just how powerful students in the Faculty of Science are. He will ask one or two groups to give a three-minute presentation at a future Faculty meeting.
 - b) Budget
- Dean Lennox gave a brief update to members on the progress of the Faculty Agreement. He had recently presented to the Provost a <u>draft</u> of the Faculty's capital and operating requests associated with its mission. Dean Lennox, Kelly Cornford, Financial Planning Manager, and her staff are continuing to work on the draft Agreement. He expected the final version in mid-January 2016.

6) REPORTS OF DIRECTOR AND ASSOCIATE DEANS

- a) Director (Advising Services) Nicole Allard
- b) Associate Dean (Graduate Education) Laura Nilson
- c) Associate Dean (Research) Doina Précup
- d) Associate Dean (Academic) Tamara Western

There were no reports from the Director and Associate Deans.

7) REPORTS ON ACTIONS OF SENATE

Senate Meeting of 18 November, 2015 – Senator John Gyakum

Chair's Remarks

The Chair, Principal Fortier, congratulated Senator Edith Zorychta on her reelection to the Board of Governors, as a Senate representative. The Chair offered her condolences to all affected by the recent terrorist attacks in Paris, France. She expressed appreciation to Senator Dyens, the Deputy Provost (Student Life and Learning), the Dean of Students, and their teams for providing support to members of the McGill community affected by the tragedy. On a more optimistic note, the Chair noted that Prime Minister Trudeau has appointed his cabinet, 30 in total, including three McGill alumni. The Chair indicated that the position of Chief Science Officer is to be created, and that new Canada Research Chairs will be established in the areas of sustainable technologies. Of particular importance to the Faculty of Science are the appointments of the new Minister of Innovation, Science, and Economic Development, Navdeep Baines, the Minister of Science, Kirsty Duncan, and the Minister of Environment and Climate Change, Catherine McKenna.

Part "A" - Questions and Motions by Members

1. Question Regarding the Impact of International Tuition Deregulation on McGill's International Student Community

The question submitted by Senators Sobat and Rourke, was composed of three parts: a) Is the University's stance on international tuition deregulation compatible with the desire for a diverse international student community? b) Is the University willing to make sacrifices in terms of educational accessibility and/or revenue generation in the context of its International Strategy? and c) What measures can the University establish to achieve balance between educational accessibility and international tuition rates and how will members of the community be involved in achieving this balance?

Senator Dyens provided a written response to the questions. McGill University remains committed to being one of the most internationally diverse among all universities, although decreases in government support make this goal challenging. McGill's international strategy is not established, as consultations have just begun. Yet, any strategy will not involve sacrifices in academic program quality, nor to the core ideals of equity and inclusiveness. McGill's goal is to remain as accessible as possible. Its financial aid has increased from \$10M to \$26M from 2004 to 2014.

During the ensuing discussion, the Principal pointed out that deregulation significantly enhances the university's resources, considering the fees remain at McGill instead of being redistributed to other Quebec universities. In response to a question of whether the previously implemented MIDAs program may be restarted, Senator Manfredi indicated that the MIDAs program was not sustainable financially, and that graduate funding mechanisms need further review.

Part "B" – Motions and Reports from Organs of University Government

1. Annual Report on the Financial State of the University

Vice-Principal (Administration and Finance) Di Grappa presented the report for information. Among the concerns expressed by Senator Di Grappa were the onerous reporting requirements set by the province, while evidently much of the reporting goes unread. He estimates that ~\$1 million annually could be saved with the removal of unnecessary reporting. Another concern is the ~\$1.3 billion in deferred maintenance costs.

2. Budget Planning 2016-2017 Report I

Provost and Vice-Principal (Academic) Manfredi presented the report for information. Senator Manfredi noted that the university had just received its final budget allocation from the province, six months into the current year. The good news is that no significant changes in the financial planning that had occurred this past spring are necessary. However, it is expected that further cuts to the provincial allocations are expected in the next fiscal year.

3. Proposed Revisions to the Policy on Safe Disclosure

The report, presented for approval by Associate Provost (Policies, Procedures and Equity) Campbell. Senator Richard proposed an amendment in the preamble that explicitly includes the protection for an innocent Respondent. Senator Campbell spoke against the amendment, arguing that protection of innocent Respondents is already provided in the body of the proposed revised policy. Senator Richard's amendment was defeated, and the proposed revisions were approved.

4. Annual Report of the Committee on Enrolment and Student Affairs (2014-2015)

The report was presented by the Deputy Provost (Student Life and Learning), Ollivier Dyens, for information.

5. Annual Report of the Committee on Student Discipline

Upon the granting of Speaker's rights to Associate Dean for Student Affairs, Glen Zabowski presented this report for information. He noted that there continues to be a decline in the number of cases. Plagiarism represents the majority of cases that are

reported. The Faculty of Science accounts for a disproportionally large number of cases. This fact may be explained by the large number of large classes in Science, and by the large number of laboratory reports. The committee is working with the Faculty of Science Disciplinary Officer, who in turn, is working with instructors to address this problem.

6. Report of the Joint Board-Senate Meeting: Designing a Smart Campus for the 21st Century

The Principal remarked that many excellent ideas were presented at this meeting.

7. Other business

The Principal took the opportunity to invite all Senators to the forthcoming Teaching and Learning Services Symposium, to be held on Friday, December 11, 2015, in the New Residence Hall Ballroom.

The Principal introduced a short video produced by two McGill University graduate students. The message of the video in the wake of the Paris attacks is that love overcomes fear.

8. The Senate continued its meeting in a confidential session to consider the Report of the Honorary Degrees and Convocations Committee.

8) MEMBERS' QUESTION PERIOD

There were no members' questions.

9) OTHER BUSINESS

Dean Lennox wished everyone Happy Holidays and best wishes for 2016!!

At 3:50 p.m., there being no other business, Prof. Mucci **moved**, seconded by Prof. Lydon, that the meeting be adjourned.

The motion carried.