

**FACULTY OF SCIENCE
Meeting of Faculty
14 April 2020 at 3:00 p.m.
Held Via Zoom**

ATTENDANCE: As recorded in the Faculty Appendix Book

DOCUMENTS: S-19-25, S-19-26

Dean Lennox called the meeting to order at 3:00 p.m., and welcomed members to an unusual (virtual) Faculty of Science meeting.

1) ADOPTION OF AGENDA

Prof. Harpp **moved**, seconded by Prof. Roulet, that the Agenda be adopted.

The motion carried.

2) MINUTES OF 18 FEBRUARY 2020

S-19-25

Prof. Perepichka **moved**, seconded by Prof. Brouhard, that the Minutes be approved.

The motion carried.

3) BUSINESS ARISING FROM THE MINUTES

- Pages 8-9, Item # 8, Master of Arts and Science in Complex Problem Solving

Vice-Dean Stephens said that at the Faculty of Science meeting on 18 February 2020, the Faculty passed a motion that the Academic Committee would be the decision-making body for the M.A.&Sc. program and courses. The M.A. & Sc. was approved by the Academic Committee on 25 February 2020, but it was not approved by the Faculty of Arts. Therefore, further discussion on the M.A.&Sc. is temporary on hold due to the Covid-19 situation.

4) REPORT OF COMMITTEE

a) Academic Committee

S-19-21

The following proposals were approved at the Academic Committee meeting held on 25 February 2020:

**1. Faculty of Science
New Course**

FSCI 342

Experiential Learning - Language
0 credit

AC-19-57

Associate Dean Hundemer said that FSCI 342 was created for students on the McCall McBain International Fellowship, but it will also be open to future approved experiential language learning exercises. Students are required to take language courses abroad for a semester, live with a host family, and/or volunteer with a local organization. This is an official McGill activity, and this type of course should be reflected on the transcript.

Due to the Covid-19 pandemic, FSCI 451 and the Barbados Field Study Semester will be postponed to a future meeting.

New Course

FSCI 451 Research in Barbados **AC-19-58**
6 credits

Program Revisions:

Barbados Field Study Semester **AC-19-59**

2. **Chemistry**

BIOT 505 Selected Topics in Biotechnology **AC-19-60**
Change in teaching unit
3 credits

Associate Dean Hundemer said that the Department of Chemistry will be taking over the teaching responsibilities of BIOT 505 from the Department of Biology because there is no instructor available to teach the course; hence the proposed change in teaching unit.

Associate Dean Hundemer **moved**, seconded by Prof. Perepichka, that the change be approved.

The motion carried.

3. **Biology/Psychology**

New Course

BIOL 506 Neurobiology of Learning and Memory **AC-19-61**
3 credits

Associate Dean Hundemer explained that BIOL 514 and PSYC 514 were double-prefix courses and were identical in content, title, etc. After a review of the course material, it was decided that there was sufficient material to warrant two separate courses - one focusing on the biology of learning and memory, and another course focusing on the psychology of memory. Following from this, a new course is being created, BIOL 506, and PSYC 514 is being revised (below) accordingly, and BIOL 514 is being retired. The instructor of BIOL 506 emphasized the importance of having two courses to do justice in this area, and that there was wide interest in the topic.

Course retirement

BIOL 514 Neurobiology of Learning and Memory **AC-19-63**
3 credits

The course retirement of BIOL 514 is due to the new BIOL 506 course, and the revised PSYC 514.

PSYC 514 Neurobiology of Memory **AC-19-62**
Changes: title, description, restrictions
3 credits

Associate Dean Hundemer **moved**, seconded by Prof. Lydon, that the above new course and course revisions are approved.

The motion carried.

4. **Psychology**

New Course

PSYC 319 Computational Modelling of Cognition **AC-19-64**
3 credits

Associate Dean Hundemer described the course content of PSYC 319 focussing on computational cognitive modelling. The course will be taught by a new instructor in the Department of Psychology.

Associate Dean Hundemer **moved**, seconded by Prof. Lydon, that the course be adopted.

The motion carried.

5. **Computer Science**

New Course

COMP 451	Fundamentals of Machine Learning 3 credits	AC-19-65
----------	---	-----------------

COMP 551	Applied Machine Learning Changes in restrictions 4 credits	AC-19-67
----------	--	-----------------

Associate Dean Hundemer explained that the current course COMP 551 is heavily populated and is taken by Computer Science undergraduates and graduate students, as well as by students in different majors. The intent is to introduce a new course, COMP 451, for undergraduate students only, with a focus more on theories rather than applications.

New Course

COMP 579	Reinforcement Learning 4 credits	AC-19-66
----------	-------------------------------------	-----------------

Associate Dean Hundemer said that COMP 579 has been offered as a topics course for several years, and has been successful. The School of Computer Science would now like to make it an official course.

New Course

COMP 602	Computer Science Seminar 1 1 credit	AC-19-70
----------	--	-----------------

New Course

COMP 603	Computer Science Seminar 2 1 credit	AC-19-71
----------	--	-----------------

Program Revisions

- M.Sc. in Computer Science (Thesis)	AC-19-68
--------------------------------------	-----------------

- M.Sc. in Computer Science (Non-Thesis)	AC-19-69
--	-----------------

Associate Dean Hundemer said that the Thesis and Non-Thesis M.Sc. in Computer Science are course-credit-heavy, and not aligned with other Computer Science programs in Canada, as well as some of the M.Sc. programs in the Faculty. The changes involve the removal of courses that are no longer relevant, and the replacements of two one-credit new courses, COMP 602 and COMP 603. Also, the Complementary courses, including the breadth requirements, have been reduced.

Associate Dean Hundemer **moved**, seconded by Prof. Kemme, that all of the above new courses/course revisions and program changes be approved.

The motion carried.

6. **Geography**

New Course

GEOG 333	Introduction to Programming for the Spatial Sciences 3 credits	AC-19-72
----------	---	-----------------

Associate Dean Hundemer described the content and focus of the new course, GEOG 333, a general introduction to Python programming language. The course has been taught as a topics course by a new instructor in the Department of Geography.

New Course

GEOG 401	Socio-Environmental Systems: Theory and Simulation 3 credits	AC-19-73
----------	---	-----------------

New Course

GEOG 601	Advanced Environmental Systems Modeling 3 credits	AC-19-74
----------	--	-----------------

Associate Dean Hundemer introduced two new courses, GEOG 401 and GEOG 601. These courses will replace a high-enrolment course, GEOG 501 (to be retired – see below), and will be split into two new courses: GEOG 401 has been designed for undergraduate students, and GEOG 601 will be offered to graduate students only.

Course Retirement

GEOG 501	Modelling Environmental Systems 3 credits	AC-19-75
----------	--	-----------------

Program Revisions

- B.A.; Minor Concentration in GIS & Remote Sensing	AC-19-76
---	-----------------

Associate Dean Hundemer said that the main changes are: including a description of the program; COMP 202 will be a Complementary course; the new course, GEOG 333, will be included as an option between COMP 202 or GEOG 333; and the remainder of the changes are housekeeping in nature.

- B.Sc.; Minor in GIS & Remote Sensing (Revised Program Title)	AC-19-77
--	-----------------

Associate Dean Hundemer explained that the purpose of the title change is to capture both Geographic Information Systems and Geographic Information Science, and to keep it consistent with the B.A. Minor Concentration in GIS & Remote Sensing. For the same reason above, COMP 202 and GEOG 333 have been added as Complementary courses.

Associate Dean Hundemer **moved**, seconded by Prof. Chmura, that all of the above new courses/course retirement and program changes be approved.

The motion carried.

5) **DEAN'S BUSINESS**

b) Announcements

Dean Lennox announced that the weekly Faculty of Science Town Halls will continue to be held. In addition, the Faculty is in the process of planning delivery of courses in the Fall 2020 term.

6) **SCIENCE UNDERGRADUATE SOCIETY (SUS) REPORT**

Ms. Marjan Ghazi, President of the SUS, gave the following report:

On March 11 2020, the SUS held a General Assembly. The SUS General Assembly is the opportunity for constituents that aren't members of the SUS General Council to participate by being allowed to bring forth motions, debate, vote, etc. It differs from the SUS General Council meetings where only SUS and departmental council executives have membership. Unfortunately, quorum was not met for the meeting to proceed as a General Assembly and it proceeded as an SUS General Council meeting. However, constituents that attended were still able to participate as gallery members.

The SUS General Council meetings scheduled for March 25th and April 8th were held via Zoom and the link was shared with constituents to participate as gallery members. In addition, the SUS Executives, committees and many departmental councils also adopted Zoom as their virtual meeting room for the remainder of the year.

The SUS had its elections for the 2020-2021 SUS Executives, SSMU Representatives and Senator in the month of March. The election results were ratified by the SUS General Council on March 25, 2020. The incoming individuals will begin their term on May 1st. Hence, in May, Marjan Ghazi's term as SUS President will end and Sydney Merritt will represent the SUS at the Faculty of Science meetings.

The SUS Executives continued to receive complaints regarding the lack of study spaces in the FDA/Burnside/McConnell building complex dedicated to students affected by the closure of the Schulich Library of Physical Sciences, Life Sciences, and Engineering. The difficulties of this closure were made apparent in the Winter semester once students had to travel through unfavorable weather conditions during their breaks between classes to frequent the McLennan/Redpath library when a study space near the Schulich Library would be more convenient. We hope to further collaborate with the Faculty of Science and the greater McGill Administration to address this issue, perhaps by reallocating spaces to allow for study rooms in the FDA/Burnside/McConnell building complex, to accommodate Science students who were greatly affected by this library closure.

Due to the limitations posed by the COVID-19 crisis, all SUS events scheduled from March 12th and on were cancelled, including the Graduation Ball, Charity Week, SUS Appreciation Night among other events of the Society and its departmental councils.

This situation has also left the renewal of the SUS Memorandum of Agreement (MOA) with McGill University on hold, but we expect meetings with the office of the Deputy Provost of Student Life and Learning concerning the MOA to resume shortly, understanding the office has matters of higher priority to address.

Several SUS Executives had received emails from different constituents inquiring about their academics given the situation caused by the COVID-19 crisis. We have been referring all students to their SOUSA advisors, as per the SOUSA office's wishes. Many students have expressed great relief and appreciation towards the Faculty's academic accommodations for the Winter 2020 semester, such as the accommodations made for final exams. The Faculty's efforts have not gone unnoticed by the SUS.

Dean Lennox thanked Ms. Ghazi for serving as President of the SUS over the last semester, and for the reports to Faculty meetings. He emphasized the importance of hearing from the President and her colleagues.

7) **SCIENCE EQUITY AND CLIMATE COMMITTEE (SECC)**

Associate Dean Nilson said that most of the SECC activities are on hold due to the Covid-19 situation. However, a sub-committee on graduate student wellness has been reaching out to graduate students in the Faculty of Science and the Faculty of Engineering to help support them in this difficult time. The SECC has partnered with the Graduate Engineering Equity Committee on several events to encourage graduate student wellness. The SECC compiled a list of wellness resources which include workshops, courses, support groups, online forums, etc., to distribute to students. A self-care Bingo series and a photo competition was held for students, postdoctorals, staff and faculty members. Additionally, some ideas for planning research activities during and after the shutdown were distributed.

8) The New Vic - Update

Dean Lennox gave an update on the New Vic project. The Functional Technical Program (FTP) report has been completed. The largest group in the New Vic will be the Faculty of Science. The architects have been working on the design phase, and Dean Lennox gave a PowerPoint presentation, showing that the facade of the three heritage buildings will remain intact, and the inside will be entirely renovated. There will be space for large events, and the City of Montreal is very much interested in a visual entrance. Included in the design, there will be a rotunda, and geographical hubs, classrooms, open space, library, food service, study space, laboratories, offices and meeting rooms, large computational laboratory, and a large atrium.

9) REPORTS OF DIRECTOR AND ASSOCIATE DEANS

a) Director (Advising Services) Nicole Allard

Director Allard said the SOUSA team and the Call Centre are working virtually. She thanked Peter Barry, Chief Academic Advisor, for the work well done. The next big task will be working on the B.Sc. and B.A. & Sc. graduation lists, and advising students via Zoom meetings.

b) Associate Dean (Academic) Axel Hundemer

Associate Dean Hundemer reminded members that if there were course proposals that need to be revised for Fall 2020, they should contact him as soon as possible. He hoped that the SCTP will hold additional meetings during the Summer 2020.

c) Associate Dean (Graduate Education) Laura Nilson

Associate Dean Nilson said she has been answering questions from researchers about deadlines and graduate students. She reminded members that there are FAQs on both the Faculty of Science's website as well as on the Office of Graduate and Postdoctoral Studies' website. Members should feel free to contact her directly with any questions, comments or concerns.

d) Associate Dean (Research) John Stix

There was no report for the current meeting.

10) REPORTS ON ACTIONS OF SENATE

Please note that the entire Minutes of Senate are available on the web at:
<https://www.mcgill.ca/senate/senate-2019-2020/senate-meeting-documents-2019-2020>

Senator Laura Nilson – Senate meeting of 19 February 2020

SECTION I

1. The meeting opened with welcoming remarks from the Chair, memorial tributes to Professor Kenneth Morgan (Faculty of Medicine) and Prof Ronald Melzack (Psychology, Faculty of Science), and the approval of the Report of the Steering Committee.

2 This was followed by the Chair's Opening Remarks which included

a. a mention of the COVID-19 coronavirus outbreak, and comments that the university was monitoring the situation as well as being proactive in planning and preparation.

b. Government Relations

The Québec budget will be tabled on March 10; the Bureau de coopération interuniversitaire (BCI) have been making a case for more resources (additional professors, more IT, more support to move research findings to innovation to benefit society. The Federal budget was not expected before April 2020. The Ministère de l'Immigration, de la Francisation et de l'Intégration announced that consultations would be held on the amendments to the Programme de l'expérience québécoise(PEQ) and that McGill would work with other universities to present a common position. The Québec government was creating "innovation zones" to foster innovation, attract foreign investment and enhance Quebec's international reach, noting that McGill has been working with partners from the business and academic sectors to develop an innovation zone in clean tech.

c. External Relations

Regarding external relations, the Chair spoke about her participation in the 50th anniversary edition of the World Economic Forum Annual meeting in Davos, noting that this year's theme was "Stakeholders for a Cohesive and Sustainable World." She also mentioned that she is serving as chair of the Global University Leaders Forum (GULF), an advisory community comprised of 29 of the world's top universities.

d. Fundraising

The Montreal Neurological Institute Hospital Neurological Institute-Hospital launched a new campaign, Brains Need Open Minds – patient-centered, open science institution. McGill's annual day of giving, McGill 24, will take place on March 11, 2020. McGill is a top fundraising institution for the Centraide campaign.

e. Senior Administration

Dean Nalbantoglu was reappointed as Dean of Graduate and Postdoctoral Studies for a five-year term beginning on July 1, 2020.

Dean Cook was reappointed for a two-year term as Trenholme Dean of Libraries beginning September 1, 2020.

f. Senate Kudos

Super Bowl champion Dr. Laurent Duvernay-Tardif (McGill M.D., C.M. 2018) on his achievements.

Professors Simon Caron-Huot (Department of Physics), Adrian Liu (Department of Physics and the McGill Space Institute) and Jennifer Sunday (Department of Biology) on being among the recipients of the 2020 Sloan Research Fellowship

SECTION II

Part "A" – Senate then considered Questions and Motions by Members

1. Question Regarding the University Student Assessment Policy

Answer was provided; student senator followed up to ask that a requirement be added for professors to be familiar with the USAP; also said that the chain of appealing is too complicated; Senator LeBeau replied that the goal is to have a quick local solution.

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

1. Report of the Provost's Working Group on Salary Equity (D19-32)

Senator Campbell presented the report. Gender-based salary differences have been noted for a long time but explanatory variables have always been noted; still, people have been concerned so a more detailed report by a task force was done. This is the report from that task force.

Results: once key variables were taken into account, no significant differences between men and women, except in the top 5% of salaries. No systemic inequities for other groups either.

However, it was noted that the University could take measures to try to mitigate the impact of some variables that can exert an inequitable impact on women's salaries – three recommendations. The Working Group's recommendations included undertaking concerted efforts to mentor and encourage women Associate Professors to apply for promotion to the rank of Full Professor in a timely manner as well as rigorously following employment equity principles and practices to advance the equitable representation of women across all academic units and in the lateral recruitment of senior professors to the rank of Full Professor.

Comments from senators: similar analysis should be done on faculty lecturers and other CAS.

2. 497th Report of the Academic Policy Committee (D19-33)

Senator Campbell presented the report.

A. The first item was a proposal from the Faculty of Medicine to

- create the School of Biomedical Sciences,
- create a School of Medicine
- rename the Faculty of Medicine to the Faculty of Medicine and Health Sciences.

These proposals are part of Project Renaissance, the Faculty's new strategic planning exercise, which was presented to Senate for information on May 15, 2019.

Each of these three items was approved by Senate and recommended to the Board of Governors.

B. The second item for Senate's consideration was a proposal from the Council of Graduate and Postdoctoral Studies to create a Cumulative or Stackable Master's degree. Cumulative Master's degree is obtained through a coherent and thematic selection of certificates and diplomas, which are combined or "stacked" together to comprise a degree that is specialized in nature, flexible in completion times, and contains recognized intermissions of achievement. The objective is to give better access to higher education to clientele that would not necessarily consider pursuing graduate studies. It is also attractive for working professionals seeking additional credentials.

Senate approved the Cumulative or Stackable Master's as a new pathway towards acquiring an existing Master's Degree.

3. The Report of the Senate Nominating Committee (D19-34) was presented by Senator Campbell and the recommendations were approved.

3.1 Proposed Revisions to the Academic Policy Committee's Terms of Reference

4. An update on McGill Men's Varsity Teams Naming Process (D19-35) was presented by Senator Labeau

The mandate of the committee and its approaches to consultation with stakeholder groups was discussed, as well as their goal of defining the qualities of a suitable name rather than just a popular vote.

The committee's mandate is to solicit input from community about the new name for men's varsity team and also for input on criteria. Also to obtain input from the athletes. To do this, they have been doing consultations through an online web form and also with interviews and meetings with stakeholder groups, e.g. athletes, alumni, etc. An important goal is to help define the qualities of a suitable name (as opposed to just a popular vote).

5. Annual Reports

5.1 Enrolment and Strategic Enrolment Management (2019-20) (D19-36)

Senator Labeau presented this report on Enrolment and Strategic Enrolment Management for 2019/2020 to Senate, as reflected in McGill's Strategic Academic Plan (2017-2022).

5.2 Graduate and Postdoctoral Studies (2019) (D19-37)

Senator Nalbantoglu presented this report.

5.3 Ombudsperson for Students (2018-19) (D19-38)

Professor Dimitrios Berk, Ombudsperson for Students Information, presented this report for Senate's information.

5.4 Advisory Council on the Charter of Students' Rights (2018-19) (D19-30)

Senator Sinacore presented this report.

6. Senate Calendar of Dates 2020

Presented by the Secretary-General for information.

The meeting adjourned at 4:25pm.

11) MEMBERS' QUESTION PERIOD

There were no members' questions.

12) OTHER BUSINESS

- Communication during Covid-19 Pandemic

Dean Lennox asked members for their comments about the Faculty's method of communication during this challenging time. Some of the comments expressed by members were: that communication from the Faculty was generally very helpful, that perhaps a collection of announcements (from the Faculty and the administration) could be made, and that updates for students are very much appreciated. Mr. Fergus Grieve added that messages from the Dean, Vice-Dean, and Associate Deans could be collated, and that it was important not to duplicate announcements.

There being no further business, Prof. Lydon **moved**, seconded by Prof. Harpp, that the meeting be adjourned at 4:30 p.m.

The motion carried.