

**FACULTY OF SCIENCE
ACADEMIC COMMITTEE**

Minutes of the meeting held on 29 October 2019 at 3:00 p.m. in Arts Council Room, Arts 160.

PRESENT: Vice-Dean David Stephens, Associate Dean (Academic) Axel Hundemer, Director (Advising Services) Nicole Allard; Professors Amy Blum, Paul François, Margaret Kalacska (in place of Ben Forest), Timothy Merlis, Johanna Neslehova, Ana Nyzhnyk, Jeanne Paquette, Tamara Western, Kathy Roulet, Clark Verbrugge; Emily Dinunzio, Dylan Wong; Natalie Waters; Faye Hughes, Josie D'Amico.

REGRETS: Professors Huy Bui, Maxime Denis, Abigail Gerhold, Barbara Hales; Greg Marczynski, Julia Morales-Aguirre, Andrew Nguyen, Gillian O'Driscoll, Samantha Pritchard, Keerth Raveendra, Juliann Wray.

DOCUMENTS: AC-19-11 to AC-19-19

Vice-Dean Stephens welcomed members and called the meeting to order at 3:00 p.m.

1. Adoption of Agenda

Prof. Western **moved**, seconded by Prof. Blum, that the Agenda be adopted.

The motion carried.

2. Minutes of 24 September 2019

AC-19-11

Prof. Western **moved**, seconded by Prof. Verbrugge, that the Minutes be approved.

The motion carried.

3. Business Arising from the Minutes

- Item #5; Academic Committee Meeting, 24 September 2019
PHYS 447, Applications of Quantum Mech. (3 credits)
(Changes in restriction, prerequisites), (AC-19-4)

Associate Dean Hundemer informed members that at the last Faculty of Science meeting held on 15 October 2019, a friendly amendment was passed that PHYS 447 should not be open to any Honours or Joint Honours Programs in Physics; however, following further verification, it was decided to explicitly list all the programs that were affected, namely:

B.Sc. Honours in Mathematics and Physics
B.Sc. Honours in Physics
B.Sc. Honours in Physics and Chemistry
B.Sc. Honours in Physics and Computer Science
B.Eng. Honours in Electrical Engineering
B.Eng. Minor in Physics

4. McGill School of Environment

ENVR 495

Honours Research
Changes in restrictions
6 credits

AC-19-12

Program Revisions:

- Environment Major (B.Sc.) – Land Surface Processes & Environmental Change **AC-19-13**
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Biological stream) **AC-19-14**
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Physical stream) **AC-19-15**

Ms. Roulet introduced the changes to the restrictions for ENVR 495 and the above three domains in Environment. The changes to ENVR 495 were due to omissions when ENVR 496 and ENVR 497 (two three-credit courses) were retired and ENVR 495 (6 credits) was revised in the 2018-2019 academic year. The restrictions should have been updated to include students in the B.Sc. (Ag.Env.Sc.) degree, as well as students in the B.A. & Sc. Honours Program in Sustainability, Science and Society.

The changes to the three domains in Environment were largely housekeeping in nature. A preamble concerning Statistics courses was added to the programs to provide clarification.

Members agreed to remove EPSC 580, Aqueous Geochemistry (3 credits), from the list of Complementary courses in the B.Sc. Major in Environment – Land Surface Processes & Environmental Change under List B, Surface Processes.

Ms. Roulet **moved**, seconded by Prof. Paquette, that the changes to ENVR 495 and the above Environment domains be approved with the above change.

The motion carried.

B.Sc. (Ag.Env Sc.) For Information Only:

- Environment Major (B.Sc.) – Land Surface Processes & Environment Change
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Biological stream)
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Physical stream)

5. Physics

PHYS 331 Topics in Classical Mechanics **AC-19-16**
Change in description
3 credits

Prof. François said the course description was updated to include two topics to better reflect the current course content.

Prof. François **moved**, seconded by Prof. Neslehova, that the changes be approved.

The motion carried.

6. Biology

BIOL 314 Molecular Biology of Cancer **AC-19-17**
Changes in title and prerequisites
3 credits

On behalf of Prof. Gerhold, Prof. Western explained the changes to the title and prerequisites for BIOL 314. She said the rationale for revising the course title is to better capture the course content, and that the reason for changing the prerequisites was to include an alternative course to BIOL 200 and BIOL 201.

Prof. Western **moved**, seconded by Prof. Blum, that the changes be approved.

The motion carried.

7. Chemistry

Program Revisions:

- B.Sc. Liberal; Core Science Component in Chemistry – General **AC-19-18**

Program Option Retirement:

- B.Sc. Liberal; Core Science Component in Chemistry – Biological **AC-19-19**

Prof. Blum said that the Department currently offers two Liberal programs, and both programs are extremely rigid in that they include very few Complementary courses, which results in substitutions in courses at graduation, and the enrolment is very low. The aim is to retire the Biological Option from the Liberal Core Science Component in Chemistry, and increase flexibility in the General Option.

Associate Dean Hundemer said he was concerned with the increase in program credit weight for a Liberal program. When the Liberal programs were created, the idea was to offer a flexible and modular program with a total program credit weight of between 45 – 49 credits. Although there are two other programs in the Faculty offering Liberal programs requiring 50 credits, the intent of the Liberal programs was to be less heavy in credit requirements, given that some major programs comprise 54 credits.

Following some discussion concerning the stated program credit weights versus the actual program weight, given the number of courses with CEGEP equivalents, members agreed that the 4-credit course CHEM 222 (Introductory to Organic 2) be replaced by another course.

Prof. Blum **moved**, seconded by Prof. Verbrugge, that the changes be approved with the above amendment.

The motion carried.

8. SUS Activities

Mr. Wong, President of the SUS, announced to members that the Graduate and Professional Schools Fair will take place on Tuesday, November 5, 2019, in the New Residence Hall.

9. Other Business

(i) B.Sc. Liberal Programs

Associate Dean Hundemer said that, in view of the above discussion concerning the Liberal programs, he noted that since the implementation of these programs in 2007, not many Liberal programs have been revised. He asked members to review their departmental Liberal programs with respect to two aspects: to ensure that the programs are still viable in their own right, and to look at whether the programs serve as an alternative for students not doing well in the Major programs. Associate Dean Hundemer said that statistics have shown that students often switch to the Liberal programs in the U3 year.

In response to a member, Director Allard said that a small number of students declared the Liberal program in U1 (20 students), whereas 40 and 57 students, respectively, declared their Liberal program in later years (U2 and U3). In reply to another question, Associate Dean Hundemer said that it was probably not a good idea to design liberal

programs as fallback programs but, on the other hand, there is nothing wrong with offering a meaningful degree for students who are unable to complete a majors program.

- (i) Dean's Multidisciplinary Undergraduate List (DMURL)**
- (ii) B.Sc. Global Designation**

Following the last Academic Committee meeting on 24 September 2019, at which time there was a general discussion on the possibility of revising the DMURL and the B.Sc. Global designations, Associate Dean Hundemer said that he had received only one comment so far. At the next Academic Committee meeting, scheduled for 19 November 2019, these designations will be discussed more thoroughly.

Associate Dean Hundemer said that he would likely either propose substantial revisions to the B.Sc. Global or retire it completely. In regard to the DMURL, he would like to replace the interdisciplinary aspect of the DMURL, which measures research quantity, with a new designation that measures research quality. The Faculty would provide each department with a percentage of awards proportional to the number of NSERC/SURA awards a department is receiving, or proportional to the number of students in research courses. The decisions would be made at the discretion of the individual departments, and then the Faculty would award the designation to a select number of students every year. The intent is to make the proposed designation available to both Major and Honours students. Associate Dean Hundemer asked members to contact him with any suggestions.

There being no further business, Prof. Blum **moved**, seconded by Prof. Western, that the meeting be adjourned.

The motion carried.