

**FACULTY OF SCIENCE
ACADEMIC COMMITTEE**

Minutes of the meeting held on 20 November, 2018, at 2:30 p.m. in Arts Council Room, Arts 160.

PRESENT: Associate Dean (Academic) Axel Hundemer, Director (Advising Services) Nicole Allard, Professors Amy Blum, Huy Bui, Maxime Denis, Gail Chmura, Andrew Cumming, Barbara Hales, Michael Hendricks, Timothy Merlis, Johanna Neslehova, Ana Nyzhnyk, Jeanne Paquette, Clark Verbrugge; Natalie Waters; Riley Bowker, Reem Mandil, Kate Noseworthy, Michael Ogundeji, Camy Zeitouni (in place of Elya Quesnel), Simon Rahman, Lina Alvarez, Josie D'Amico.

REGRETS: Dean Bruce Lennox, Associate Dean (Education) Tamara Western, Professors Greg Marczynski, Gillian O'Driscoll, Kathy Roulet

DOCUMENTS: AC-18-34 to AC-18-57

In the absence of Dean Lennox, Associate Dean Hundemer called the meeting to order at 2:30 p.m.

(1) Adoption of Agenda

Item # 6 (Psychology) and Item # 7, PHYS 512, will be considered at a future Academic Committee meeting.

Prof. Cumming **moved**, seconded by Prof. Denis, that the amended Agenda be approved

The motion carried.

(2) Minutes of 30 October 2018

Item #14, Proposed Course Evaluation Questions (Document AC-18-31), Minutes of the Academic Committee Meeting

In item #14, after paragraph #5, the following should be added:
The biomedical departments were not required to use the proposed course evaluation questions in Document AC-18-31 for their courses.

Prof. Paquette **moved**, seconded by Prof. Neslehova, that the amended Minutes be approved.

The motion carried.

(3) Business Arising from the Minutes

There was no business arising from the Minutes.

(4) Neuroscience

- Major in Neuroscience

AC-18-35

- Honours in Neuroscience

AC-18-36

Prof. Monroe Cohen described the changes to the Honours and Major Programs in Neuroscience. He said that the proposed revisions to the Honours Program

were the addition of: (a) new core complementary courses; and (b) 200, 300, 400 and 500-level courses to the list of Complementary courses. The revisions in the Major Program included (a) and (b) above, and the rearrangement of courses to Streams B and C.

Prof. Cohen pointed out that in Documents AC-18-35 and AC-18-36, under Complementary courses (45 credits) in the Major and Honours Programs, MATH 324, Statistics, 3 credits, should replace MATH 323, Probability, 3 credits.

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

The motion carried.

(5) Mathematics & Statistics

MATH 455	Honours Analysis 4 Change in prerequisites 3 credits	AC-18-37
MATH 457	Honours Algebra 4 Change in prerequisites 3 credits	AC-18-38

Prof. Neslehova explained that the renumbering of MATH 455 and MATH 457 had been approved a number of years ago. However, the prerequisites for these courses had also been renumbered but the course revision forms were never submitted to formally correct the renumbered prerequisites for MATH 455 and MATH 457. The proposed changes in prerequisites correct these omissions.

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

The motion carried.

New Course:

MATH 682	Statistical Inference 0 credits	AC-18-20 (Rev)
----------	------------------------------------	-----------------------

Prof. Neslehova said that, at the Academic Committee meeting of 30 October 2018, questions were raised about the suitability of such a course for doctoral students in the Quantitative Life Sciences (QLS) program. She reported that the *Ministere de l'Education et de l'Enseignement superieur* (MEES) has mandated that a course in Statistical Inference be created for QLS students who have not previously taken inferential statistics. The proposed course will be needed to successfully complete the more advanced statistics courses at the 500 and 600 levels. MATH 682 will cover not only material in MATH 323 and MATH 324, but also other topics not covered in these two undergraduate courses. Moreover, MATH 682 has been tentatively running as a reading course in statistics, and the syllabus has been fine-tuned to ensure that the course adequately prepares QLS students for the more advanced statistics courses. In reply to a question, Prof. Neslehova said that, although MATH 682 is intended for QLS students, it could also be taken by graduate students in other departments.

Prof. Neslehova **moved**, seconded by Prof. Hendricks, that the course be adopted.

The motion carried.

The following Psychology proposals were postponed to a future Academic Committee meeting:

- (6) **Psychology**
PSYC 315 (Changes in prerequisites) AC-18-39
PSYC 408 (Changes in title; description; prerequisites; restrictions) AC-18-40
PSYC 483 (Changes in prerequisites; supplementary information) AC-18-41
PSYC 641, PSYC 642 (Course split (from - PSYC 641D1/D2]; course activities; title; description; restrictions) AC-18-42
- (7) **Physics**
PHYS 449 Majors Research Project AC-18-43
Change in prerequisites, restrictions
3 credits

Prof. Cumming explained that the two prerequisites for PHYS 449 are being removed because the prerequisites are not included in some of the Physics joint major programs where PHYS 449 is included, and these prerequisites are no longer needed and have been waived for many years. A restriction is being added to inform students that the course is intended for upper-level students.

Prof. Cumming **moved**, seconded by Prof. Paquette, that the changes be approved.

The motion carried.

PHYS 512 was postponed to a future Academic Committee meeting:

PHYS 512 (*New Course*) AC-18-44

Program Changes:

- B.Sc.; Liberal - Core Science Component in Physics AC-18-45

Prof. Cumming said that PHYS 447, a Required course, is being moved to the list of Complementary courses, making it consistent with other Joint Major Programs in Physics. The Complementary course credits are unchanged, reducing the total program credits to 45 (from 48).

Prof. Cumming **moved**, seconded by Prof. Chmura, that the changes be approved.

The motion carried.

- B.Sc.; Major in Physics & Geophysics AC-18-46

Prof. Cumming described the changes to the Major Program in Physics & Geophysics. The program revisions will include: (i) more Physics and Earth & Planetary Sciences courses to allow students more choices; (ii) hidden prerequisites in the program; and (iii) research courses from Earth & Planetary Sciences and Physics.

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

The motion carried.

- (8) **Earth & Planetary Sciences**

EPSC 303 [from -203] Structural Geology **AC-18-47**
Changes in number [from -203]; term; title;
prerequisites; restrictions
3 credits

Prof. Paquette said that the instructor has redesigned the course EPSC 203 so that it is now EPSC 303, a U2 course with a 200-level prerequisite. A restriction has been added to exclude students who have already taken EPSC 203, and a minor correction has been made to the course title.

Prof. Paquette **moved**, seconded by Prof. Cumming, that the changes be approved.

The motion carried.

EPSC 320 Elementary Earth Physics **AC-18-48**
Changes in course activities; supplementary information
3 credits

The changes were needed to fix errors in course activities, and to specify the lecture format in the supplementary information.

Prof. Paquette **moved**, seconded by Prof. Merlis, that the changes be approved.

The motion carried.

Course Retirement

EPSC 330 Earthquakes & Earth Structure **AC-18-49**
3 credits

Prof. Paquette explained that EPSC 330 is no longer required in the Earth & Planetary Sciences programs since another course, EPSC 520, Earthquake Physics and Geology of Earthquakes, is suitable for both undergraduate and graduate students.

Prof. Paquette **moved**, seconded by Prof. Cumming, that the course retirement be approved.

The motion carried.

Program Changes:

- Honours in Planetary Sciences **AC-18-50**

The proposed program changes were to reflect the renumbered course, EPSC 303 (approved above) in the Required list of courses, and the retirement of EPSC 330. Also, EPSC 445 will replace EPSC 435 in the Complementary list.

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

The motion carried.

(9) Atmospheric & Oceanic Sciences

ATOC 548[from -646] Mesoscale Meteorology **AC-18-51**

Changes in number [from -646]; description; prerequisites;
restrictions
3 credits

Prof. Merlis said that ATOC 548 (from -646) is being renumbered because the instruction level is suitable for U3 students. The description and prerequisites have been revised to reflect the number change, and a restriction has been added to exclude students from taking it and obtaining credits twice. He added that the course had already been offered three times to U3 students, as a special topics course, and students have completed it successfully. ATOC 548 will be added as a Complementary course to the Minor, Major, and Honours Programs in Atmospheric Science.

Prof. Merlis **moved**, seconded by Prof. Hendricks, that the changes be approved.

The motion carried.

New Course:

ATOC 557	Research Methods: Atmos-Ocean	AC-18-52
	3 credits	

Prof. Merlis introduced a new course, ATOC 557. This course is intended for M.Sc. graduate students to build students' research abilities in techniques specific to atmospheric and oceanic science. ATOC 557 will be included in the Complementary course list for the M.Sc. Program in Atmospheric & Oceanic Sciences (Thesis).

Prof. Merlis **moved**, seconded by Prof. Neslehova, that the course be adopted.

The motion carried.

(10) Biology/Bioengineering Double-Prefix Courses

BIOL 219/BIEN 219 (New) Intro PHYS Mol and Cell Biol	AC-18-53/AC-18-53A
Changes for BIOL 219: title, description, prerequisites, corequisites, restrictions, supplementary information	
4 credits	

Prof. Hendricks said that, among the above-mentioned changes, BIOL 219 is also being proposed to be double-prefixed with a new course, BIEN 219, offered by the Department of Bioengineering. BIOL 219 will be co-taught with the instructor of BIEN 219, and will replace BIOL 200 and BIOL 201 in the bio-physical sciences programs.

Director Allard said that, for advising purposes, it would be beneficial to know the reasons for making CHEM 212 (Introductory Organic Chemistry) a recommended course for the revised BIOL 219/BIEN 219, given that it is currently a corequisite, and whether students require the material covered in CHEM 212. In response, Prof. Hendricks said that students may not need the material in CHEM 212, but that he would follow up with the instructors of the course.

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

The motion carried.

New Course:

BIOL 565

Cell and Tissue Mechanobiology
3 credits

AC-18-54

Prof. Hendricks described a new advanced cell biology course, BIOL 565, which was designed by a new instructor in the Department of Biology. BIOL 565 will be included as a Complementary course in the undergraduate and graduate programs.

Prof. Hendricks **moved**, seconded by Prof. Chmura, that the course be adopted.

The motion carried.

(11) Computer Science

COMP 208

Computer Programming for PSE

AC-18-55

Changes: title, description, administering faculty, prerequisites, corequisites, restrictions, supplementary information
3 credits

Prof. Verbrugge explained that, given that COMP 208 is included in various programs in the Faculty of Science and the Faculty of Engineering, the scope of the content of COMP 208 was being broadened to bring it in line with other introductory computer science courses. The programming language is intentionally excluded from the course description, since it changes regularly. The prerequisites and restrictions are now clearly specified with course numbers. Also, to simplify the administration of COMP 208, the administration unit will be transferred to the Faculty of Science (from the Faculty of Engineering). Prof. Verbrugge answered members' questions.

Prof. Verbrugge **moved**, seconded by Prof. Chmura, that the changes be approved.

The motion carried.

- Major in Computer Science & Biology

AC-18-56

- Honours in Computer Science & Biology

AC-18-57

Prof. Verbrugge said that the proposed changes to the Major and Honours Programs in Computer Science & Biology were mostly housekeeping in nature. He added that, in an email communication, it was pointed out that the Bio-physical Sciences Core courses in document AC-18-56 should not be reorganized. The reason for this is that the Core courses were intended to be shared courses between the different Bio-physical Sciences programs, so that students could compare programs and could more easily move between programs. Prof. Verbrugge agreed with the suggestion to keep the Bio-physical Sciences Core courses as is in the Major & Honours programs. The additional changes to the Honours program included a 4-credit Honours research course at the 500-level, and a revised GPA for First Class Honours.

Prof. Verbrugge **moved**, seconded by Director Allard, that the changes be approved.

The motion carried.

(12) SUS Activities

Vice-President (Academic) Michael Ogundeji reported that the Graduate and Professional Schools Fair that was held on 6 November 2018, was very successful.

The next big event is Academia Week, which is a week-long event with different speakers, workshops, etc.

(13) Other Business

There being no further business, Director Allard **moved**, seconded by Prof. Paquette that the meeting be adjourned at 3:35 p.m.

The motion carried.

Next Meeting: 22 January 2019